

# ECCLESIASTICAL ARCHITECTURE IN THE FORTIFICATIONS OF ARMENIAN CILICIA: SECOND REPORT

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In 1981 I conducted my fourth field survey of Armenian Cilicia.<sup>1</sup> Herein is a description of all the Armenian ecclesiastical architecture surveyed in that season. The information is presented in the same format as my previous article on the subject which appeared in volume 36 of the *Dumbarton Oaks Papers*.<sup>2</sup> Frequent references will be made to the photographs and plans in that article and the reader is advised to keep it at hand. The sites in this paper can be located on the map published with the First Report by simply coordinating the degrees and minutes which are at the heading of each site. The

two categories of buildings, *Churches* and *Chapels*, are not prefaced by separate introductory remarks since the structures surveyed in 1981 conform to the established paradigms. Any exceptions or peculiarities will be explained in the description of each building. Of the eleven sites which are described in this article, four (the church of T'oros I at Anavarza, the lower terrace at Sis, the chapel at Anavarza [central bailey], and Kız [near Gösne]) were discussed in the First Report. The intent here is merely to add supplementary information about these four sites. A few general comments on Armenian ecclesiastical architecture in Cilicia are confined to the Conclusion.

## CHURCHES

*Frenk—36°58'/36°21'—Frenk Kilise*

To locate Frenk Kilise one must have the help of the local residents. The trip can be made in a Murat taxi by taking the paved road that runs southeast from Osmaniye to Külli, Zorkun, and Mitisin. Ten km. before Zorkun there is an unmarked trail to Frenk Köy (also called Fengin Köy) on the left side of the paved road. This trail, which is wide enough for only one vehicle, winds through a dense forest for at least 5 km. before reaching the village. The church is a ten-minute hike north of the village. Because of the very thick jungle around it Frenk Kilise is not clearly recognizable as a church even at close range (fig. 1). The locals reported that a small ruined castle (Frenk Kalesi) was to be found just southeast of the village. After an exhaustive search I located no more than a scattered pile of rubble. It appears that "Frenk Castle" was merely a small watchpost.<sup>3</sup>

<sup>1</sup> Without the hospitality and support of the people of Cilicia this work and the previous surveys would have been impossible. I am also indebted to the staff of the Archaeological Museum in Adana for their advice during the 1981 season. I am most grateful to Messrs. Peter Kasavan and Ross MacLeod for their help in preparing the plans. Over the past four years Mr. Kasavan, a practicing architect in Salinas (California), has devoted so much of his time to this project that the mere expression of gratitude seems inadequate. The continued encouragement from the participating faculty of the Group in Ancient History and Mediterranean Archaeology at the University of California at Berkeley is my greatest source of inspiration. A generous grant to supplement the cost of publishing the plates in this Second Report was provided by the Calouste Gulbenkian Foundation.

The reader of these reports on the churches and chapels of Cilicia will receive on the whole a very incomplete picture of the architecture of the Armenian kingdom, for I have intentionally avoided any descriptions of garrison forts and castles. At the conclusion of my fourth season I had surveyed a total of 75 fortifications whose circuit walls range in circumference from 19 m. to 4 km. All of these structures will be published in a forthcoming monograph on the military architecture of Armenian Cilicia.

<sup>2</sup> Edwards, "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia," *DOP*, 36 (1982), henceforth referred to as First Report.

One surviving example of Armenian ecclesiastical architecture which is not included in either this study or the First Report is the ruined church outside of Azgit Kalesi. I did not have sufficient time to photograph or survey it. See J. Dunbar and W. Boal, "The Castle of Azgit," *The Cilician Kingdom of Armenia*, ed. T. Boase (New York, 1978), 90–91. I did not survey adequately the areas near Feke, Namrun, Süleymanlı (Zeyt'un), and Maraş; explorations in these regions may yield more churches. See H. Aghassi, *Zeitoun*, trans A. Tchobanian (Paris, 1897), 3 ff.

<sup>3</sup> The name Frenk is attached to a fort and a mountain on some 19th- and 20th-century maps of Cilicia. Since accurate topographical charts of this region were not published until the 1940s the exact location of Frenk on the earlier maps tends to

The only substantial medieval building in the immediate vicinity of Frenk Köy is the Armenian church. In respect to its size and design Frenk Kilise is almost identical to the church of the Constable Smbat at Çandır (fig. 2).<sup>4</sup> Unfortunately, Frenk Kilise is as severely damaged as the latter. Today the entire roof has collapsed along with all of the north wall and the north half of the chevet (fig. 1). There is a gaping hole in the south wall (fig. 3) as well as one in the west wall. The auxiliary chambers to the north and part of an adjoining circuit wall are in ruins. Also, there is neither epigraphic nor literary evidence to date Frenk Kilise. No historical names can be associated with the site.

The principal feature which distinguishes this church from its counterpart in Çandır is the masonry. The majority of the facing stones in the walls of Frenk Kilise are crude when compared to the fine ashlar in the church of the Constable Smbat. Here at Frenk the exterior facing stones do not differ substantially in size and quality from the interior facing (figs. 3, 4, and 5). These crudely cut limestone blocks are generally rectangular, measuring on the average 29 cm. in length, 21 cm. in height, and 19 cm. in depth. These blocks are cemented into position with thick margins of mortar and rock chips. In the extant portions of the south and west walls (fig. 3) the cores tend to be fairly narrow and are filled with unhewn field stones. On the exterior of the south apsidioles, where the facing stones have fallen away (fig. 6), it appears that the massive core was layered in courses, like the chevet in the church of the Constable Smbat. Two other types of masonry are bound to this core. The exterior sides of the apsidal windows were neatly framed in smooth ashlar; today only the frame for the lower-level south apsidiole is still *in situ* (fig. 4). Neither its monolithic lintel nor the sides of this window show any signs of decoration. The third type of masonry consists of the unusual quoins

vary. See K. Humann and O. Puchstein, *Reisen in Kleinasien und Nordsyrien* (Berlin, 1890), 110, and the map by H. Kiepert; Maps of the War Office (United Kingdom), Sheet 22 (Marash), 1:250,000, 1902 (October), revised 1904 (March) and 1915 (November); and H. Hellenkemper, *Burgen der Kreuzritterzeit in der Grafschaft Edessa und im Königreich Kleinarmenien* (Bonn, 1976), 109, note 1.

It is quite possible that the 19th-century explorers labeled Frenk Kilise as "Frenk Kale" on their charts. Another possibility is that these earlier explorers found a large fortress somewhere on or near Frenk Dağı and this fortress has escaped my notice. I have found that Frenk, Çardak, Savranda, Hasanbeyli, and Karafrenk are five distinct medieval sites in the same region.

<sup>4</sup>First Report, fig. 1.

which are visible only in the exterior corners of the chevet (figs. 1 and 4). These are unusual because they are cut not from limestone but from serpentine, which has the typical greenish tint.<sup>5</sup> The serpentine is cut with great care and its narrow margins show slight traces of mortar.

On the interior of the church the chevet consists of a central apse flanked on each side by two apsidioles. One apsidiole is positioned directly atop its lower-level counterpart. Today the only evidence for the north apsidioles is the trace of the lower-level apsidal wall which barely protrudes above the present ground level. Because of rubble and accumulated dirt the ground level in and around the church is so high that it almost reaches the sill of the lower-level apsidal window at the south (fig. 4). Like the central apse and the south apsidioles the wall of the lower-level north apsidiole is covered with a coating of plaster that is almost 2.5 cm. thick. Traces of pigment indicate that all the apses were painted. The walls of the nave are not plastered (figs. 3 and 5). The salient created by the abutment of the central apse and north apsidioles stands to at least 3 m. in height and is rapidly deteriorating. The position, size, and possible number of windows and niches in the central apse cannot be determined because of the high ground level.

Considering the general state of the church, the south apsidioles are in a remarkably good state of preservation (figs. 5 and 7). Each is pierced by a roundheaded straight-sided window. The width of the lower level window is 33 cm. As with their counterparts in the churches at Anavarza and Çandır there is no cornice molding to separate the apsidal walls from their semidomes. Typically, the apsidioles consist of a small shallow apse and a wider, rectangular chamber directly to the west.<sup>6</sup> Like the apsidioles in the church of the Constable Smbat the barrel vaults covering these rectangular chambers are set at a slightly higher level than the semidomes of the apses, creating a continuous division. In the upper-level south apsidiole the barrel vault is partially preserved and shows that it is constructed with flat slabs that are laid radially (fig. 7). The rectangular chamber is 83 cm. in width. The barrel vault over the lower-level apsidiole has col-

<sup>5</sup>The serpentine here is actually antigorite which is a nonfibrous mineral. In a few cases blocks of serpentine are used for the exterior facing of the walls.

<sup>6</sup>The single level apsidioles in the church of T'oros I at Anavarza are not distinctly set off from their aisles, although a small space is created between the corbeled volute and the end of the salient pier.

lapsed, only the springing stones remaining *in situ*. There is no way to determine the path of entrance into the upper-level apsidioles. In the lower level south apsidiole there is a door at the west, which is limited by jambs (fig. 8). The width of this opening is approximately 60 cm. The door is exposed almost to its foundation because the villagers are excavating this apsidiole in search of treasure.

It is possible that in the present breach in the south wall of the nave there was once a door (fig. 3), but there is no evidence in the debris to confirm this. There is evidence that a door once opened in the west wall. This door was covered by a rounded vault and was not aligned to the central apse. A window with a slight splay surmounted it. The only area of the church where I found fragments of brick was in the core of the wall which had been exposed by the collapse of the west door. The nature of the covering over the nave cannot be determined. If the church of the Constable Smbat had a central dome, then this is equally possible here.

One of the problems with this church is to determine the alignment of the north wall in relation to the north apsidioles. Obviously, the design at the south was not repeated since a fragment of wall extending from the inner face of the west wall is in alignment with the center of the north apsidioles. Undoubtedly, there was a jog in the course of the north wall and a door to give access to the twin chambers at the north (fig. 9). Because of debris and undergrowth it is impossible to determine just how these chambers were integrated into the church. Their exact function is unknown. They are too large to be funerary loculi. The southernmost chamber is divided in the center by a miniature transverse arch. Both of the units in this chamber are covered by half-round vaults. There are jambs at the extreme west (fig. 9). The northernmost chamber is almost completely blocked; it is covered by a small barrel vault.

A circuit wall emerges from the northwest corner of the church and appears to encompass a sizable area to the north. The church is probably part of a fortified cloister. Undoubtedly, excavations will alter considerably my plan of this complex.

In the larger context of Armenian Cilicia it appears that Frenk Kilise represents a type of church-design that was not confined to a particular geographic region. This church was not in the castle of one of the influential baronial families, but was isolated and distant from any major road. The cloister of which it was part probably served the

needs of a small community, thus it was not necessary to invest in costly masonry and decoration.

*Saimbeyli—37°48'/36°05'—The Monastic Church of St. James*

The village of Saimbeyli (Armenian: Hačin) flanks the strategic road which links Cilicia to the Cappadocian plain, almost midway between Kayseri and Kozan. At an altitude of 1,300 m. this village fills the base of a bipartite vale at the confluence of the Kirkot Çay and the Obruk Çay. The modern paved road follows the course of the Obruk Çay from Saimbeyli to Feke. The monastery of St. James is perched on the side of an outcrop at the northwest end of the village (fig. 34, indicated by the arrow). The monastic complex is diagonally opposite the medieval fortress; the latter crowns a small spur on the east bank of the Obruk Çay (fig. 10, indicated by the arrow). Access to the monastery is facilitated by a small dirt trail which joins the main road.

In the late nineteenth century travelers reported that the three small churches in the village and the monastery were in a deplorable condition.<sup>7</sup> The dwindling population of Hačin could only afford to repair their buildings in a haphazard way and cover the earthen floors of the churches with threadbare rugs. Today, the only visible ecclesiastical structures are a small chapel in the medieval fortress and the monastic church of St. James. We know very little about the history of the monastery. It may have been founded during the period of the Armenian kingdom in the late twelfth or early thirteenth century. It was rebuilt in 1554 by the bishop Khatchadour.<sup>8</sup>

In 1981 little was left of the monastery except for a font, the foundation of an orphanage school, and fragments of a once huge circuit wall that surrounded the complex (fig. 11). The church of St. James occupies the northeast corner of the monastery. In its present state it is the largest extant Armenian church in Cilicia. The entire ceiling of the church as well as large sections of the north, west, and south walls have collapsed (fig. 10). In its undamaged state this hall church was divided longitudinally into a nave and two aisles; it was cov-

<sup>7</sup>G. Alishan, *Sissouan ou l'Arménie-Cilicie* (Venice, 1899), 174–77, and E. King, "A Journey through Armenian Cilicia," *Asian Affairs*, 24 (1937), 240–41. The latter does not discuss the monastery in his brief description of Hačin. A complete narrative of the history of Hačin can be found in Y. P. Pölkosean's, *Hačni 3ndhanow Patmow'iunə* (Los Angeles, 1942).

<sup>8</sup>The names of significant bishops who succeeded Khatchadour are listed by Father Alishan (*Sissouan*, 176); Pölkosean, *Hačni*, 350.

ered by a hipped roof and a polygonal drum of stone over the center of the nave (fig. 12).<sup>9</sup> Recently, squatters have occupied the south aisle, where they rebuilt the walls to their original height and added a roof of corrugated tin. Circumstances did not permit a formal survey of this complex. However, the plan of the church is quite simple. The exterior is typically flat on all four sides, except at the east end of the south wall where the south apsidiole is flanked by a small square room (fig. 11). The north and south walls are each about 19 m. in length. The interior diameter of the central apse is 5.35 m.

The masonry of this structure is atypical for the ecclesiastical architecture of medieval Cilicia. We have a consistent poured core which is faced on the interior by extremely crude stones (figs. 13, 14, and 15). These consist of roughly cut field stones that are anchored in regular courses by thick beds of mortar and rock chips. The only exceptions are the finely cut ashlar blocks that frame the north windows and west door (fig. 15), the terminal arches and ribs of the semidomes (fig. 16), and the apsidal niches and salient ends of the apse and apsidioles (figs. 13–14). The modern Turkish construction has reused stones from the collapsed roof and walls of the church to rebuild the south aisle-house. This Turkish masonry is completely different in that the coreless walls are frequently supported by vertical and horizontal planks (figs. 10, 13, and 15). At the southeast end the modern builders placed cinder blocks directly atop the Armenian walls (fig. 11). On the exterior the facing stones of the church are of a much better quality (figs. 10, 11, and 17). In general these ashlar blocks have a smooth exterior face and their rather narrow interstices are carefully filled with rock chips and mortar. Regarding the exterior masonry, there are two general features. All four exterior corners have well executed quoins which define the height of the very regular courses. Quoins are rare in the Armenian architecture of Cilicia.<sup>10</sup> Also, the size and quality of the facing stones increase noticeably in the upper courses.

On the exterior of the church a number of peculiarities are apparent. The present west wall appears to have a single door opening in the center

<sup>9</sup> At present I have been able to locate only this one photo (fig. 12) of the monastic church taken before 1919.

<sup>10</sup> Other evidence of quoins in Armenian ecclesiastical architecture is at Ak Kalesi (First Report), the chapel in the central bailey of Anavarza, the church at Frenk, and the platform of Kara Kilise (Sis).

(fig. 10). Square joist holes on the exterior of this wall once supported the cross beams of a now vanished narthex (fig. 12). This narthex, which obviously preceded the present west wall, was itself opened by three broad doors at the west and a highly placed window above the pointed top of each door.<sup>11</sup> Similar joist holes in the north wall supported a lower-level building which has now disappeared (cf. figs. 10 and 12). The north wall was pierced by at least two high-level windows (figs. 10 and 15). These windows overlooked the roof of the adjoining building. The accumulation of dirt makes it impossible to establish whether the north wall had once a door. The east façade is articulated at the base by a simple tapered molding (fig. 17). There is some evidence that the molding extends around the east ends of the north and south walls. Just where it terminated cannot be determined because of recent construction and landfill. No evidence of a molding can be found at the west. In the north corner of the east end some recent digging has revealed a foundation of relatively large stones that are bound by numerous rock chips and mortar (fig. 17). Undoubtedly, the underside of the molding was intended to lie on ground level. This "foundation" molding may have evolved from the crepidoma which was so common in earlier Armenian churches.<sup>12</sup> Above the molding, the first three courses are slightly larger and more crude than the rest of the wall. The possibility that they represent an earlier period of construction can be ruled out since the core of the wall, as seen in the collapsed low-level window of the central apse (figs. 13 and 17), has the same consistency and texture throughout. The only other window in the east wall was recently added to the center of the south apsidiole which the squatters have also occupied. It is a large opening with a square wooden frame.

The principal feature of the exterior of the chevet is a pentagonal wall which crowns the semidome of the central apse (figs. 10 and 17). The east facet of this wall is flush with the uppermost course of the chevet's exterior facing. Only the semidomes of the apsidioles, which are set at a much lower level than the central apsidal dome, appear to have been covered with simple sloping roofs (figs. 10 and 12). These roofs were below and independent of the

<sup>11</sup> This narthex is probably identical to the one in the church of the Holy Mother of God (see p. 130 f.), except that in the latter there are six windows above the three doors. See Pōłosian, *Hač̄ni*, 450.

<sup>12</sup> Ererouk, *Documents of Armenian Architecture*, 9 (Milan, 1977), 17 ff.

main hipped roof over the body of the church. The west ends of the roofs over the apsidioles were anchored near the bases of the diaphragm walls which stood on the terminal arches of the flanking semidomes. The tops of these diaphragm walls connected to a short wall over the terminal arch of the central apsidal dome, thus creating a continuous support for the east end of the main hipped roof.<sup>13</sup> This covering over the chevet is reminiscent of the design for the church of T'oros I at Anavarza,<sup>14</sup> except that here the sloping roof is not uninterrupted but broken in the center by the tower-like pentagonal wall, giving each apsidiole a separate covering. This pentagonal wall probably enclosed a room. Unfortunately, in our small corpus of Armenian architecture in Cilicia no parallel for this design can be found, but in the Byzantine "Grabeskirche" *extra muros* at Korykos there is a non-functional (?) chamber over the central apse.<sup>15</sup> At the church of St. James there is no practical way to enter this room, and its function here is merely decorative.

At the southeast corner a square room is attached to the south wall of the south apsidiole (fig. 11). The door in the west wall of this room, unlike the window in its south wall, appears to be part of the original construction. What remains of the south wall of the church has been repaired on a number of occasions, but there are indications of at least one door opening into the south aisle. The photograph of the church taken in the early twentieth century (fig. 12) shows that there was a high-level window at each end of the south wall. It is also quite possible that there is a vaulted south entrance into the narthex. The circuit wall, which at one time surrounded the monastery, probably attached to the church at the southeast corner (fig. 11). The masonry of the circuit wall is fairly crude, except for its quoins which are similar to those in the church.

Because of extensive damage, the exact interior plan of the church is impossible to determine. A barn with a dirt roof was constructed recently in the northwest corner of the nave (fig. 15). The beams which support the roof of the barn actually are anchored in the joist holes which once supported the one-story wooden gallery over the aisle. Just above the roof of the barn are the remains of

a sill for a window in the north wall. Farther to the east are the fragments of a jamb for a high-placed window (fig. 14). After being invited into the south aisle-house I noticed that it was constructed with the same features and proportions as the north aisle, except that a door leads from the east end of the south aisle into the chamber flanking the apsidiole.

The three apses of the chevet are both unique and typical of Armenian ecclesiastical architecture. As in the church of T'oros I at Anavarza and the church of the Constable Smbat at Çandır, flanking niches are present only in the central apse, not in the apsidioles (figs. 13–14). In profile the hoods of the niches have a rounded center and concave sides. There is evidence of an underground crypt below the central apse.<sup>16</sup> Today it is excavated and serves as a receptacle for the discharge from the overhanging privy. This chevet is the only example in Armenian Cilicia where the apsidioles are not pierced by windows and where the semidome of the central apse is not separated from the apsidal wall by a cornice molding. The only indication of where the springing level begins are the imposts which protrude slightly from the salient piers (fig. 14). The top of the semidome of the central apse appears rounded because the terminal arch has collapsed (fig. 10). The undamaged apsidioles have slightly pointed semidomes. All three semidomes are constructed with identical masonry (figs. 13, 14, and 16). Relatively crude stones, arranged in semi-circles, are anchored by a central rib of fine ashlar blocks. Only the upper halves of the semidomes are constructed of basalt; the rest of the chevet is made of limestone (fig. 13). This is the only case in Byzantine and Armenian Cilicia where an igneous rock is used in the construction of a church.<sup>17</sup> Each rib is flanked by two square ventilation ducts, which have corresponding openings on the exterior of the east wall (fig. 17). As a result of recent digging around the foundation of the apses a socle, which consists of field stones bound in a heavy mixture of mortar, has been revealed (figs. 13–14).

It seems likely that the aisles were separated from the nave by stone piers in alignment with the junctions of the apse and apsidioles. To carry the stone drum and cupola over the center of the nave four equidistant piers supported four arches. Either pendentives or squinches converted the bay of

<sup>13</sup> In fig. 13 it seems that the top of the diaphragm wall over the south apsidiole was lowered recently and leveled with a strip of cement to accommodate the house.

<sup>14</sup> First Report, fig. 3.

<sup>15</sup> E. Herzfeld and S. Guyer, *Meriamlik und Korykos*, MAMA, II (Manchester, 1930), 126 ff.

<sup>16</sup> There is a similar crypt in the cloister at Sis (fig. 57).

<sup>17</sup> Basalt and other igneous rocks are rare in Cilicia. Basalt is used occasionally for the construction of fortifications in Cilicia (e.g., Toprak Kalesi near Osmaniye). Basalt and tuff are common building materials in Armenia proper.

arches into a platform which could sustain adequately the dodecagonal drum (fig. 12). Each facet of the drum was pierced by a squareheaded window. As for the rest of the covering over the body of the church it seems unlikely that barrel vaults were employed because of the very steep pitch of the hipped roof and because there is no evidence that barrel vaults were adapted to the diaphragm walls at the east. What we probably have here is an interesting combination of a stone center surrounded by a truss roof of wood. Apparently, terracotta tiles covered the entire hipped roof as well as the depressed conical roof over the cupola.

I found evidence of only one period of construction during my investigation of the surface remains. This church is undoubtedly a sixteenth-century building.

Southwest of the church there is a large spring of sweet water. This fountain is covered by a well-executed vault of ashlar. Directly south of the church part of the foundation of a long rectangular building is visible (fig. 12). We know that this was a seminary which was converted into an orphanage-school in 1909.<sup>18</sup>

*Anavarza (south bailey)—37°15'/35°54'—The Church of T'oros I*

After another close scrutiny of the church of T'oros I at Anavarza I found no evidence to change any of my earlier conclusions about the Armenian origins of this structure.<sup>19</sup> However, I would like to add supplemental material regarding the masonry and design of this church and the adjoining structures.

The vaulted subterranean chamber directly west of the church is still inaccessible and filled with debris.<sup>20</sup> Only at the west and the south does a sufficient amount of this vaulted room protrude above ground level to allow us to evaluate the masonry (fig. 18). Although I was unable to examine either the inner facing stones or the core, it is clear that the exterior facing stones are quite different from those in the church and flanking oratory. In this subterranean chamber the exterior facing consists of large, poorly-cut blocks, which are anchored by mortar, rock chips, and small stones. These blocks are laid in irregular courses. From above it appears that the chamber is a simple rectangle which in the east wall opens into a corridor (?). The latter

seems to lead in the direction of the church. Because of the debris it is impossible to establish whether the corridor led into the church or a now missing atrium. Fragments of thin unfluted columns are visible in the area. If these structures were connected, then it is likely that the subterranean chamber is a *gavit*<sup>c</sup> (a room used for both civil and religious assemblies). It is not unusual in Armenian architecture to have a *gavit*<sup>c</sup> or other adjoining rooms built with a type of masonry that is quite inferior to that of the main church.<sup>21</sup>

I have corrected the position and size of the oratory on my plan (E on fig. 19) to show that the north wall of the church is aligned with the south exterior side of the oratory's apse but is separated from it by a continuous gap (figs. 20–21). If the entire south wall of the oratory continued on the same alignment as the apse to the west end, then that wall would be separated from the north wall of the church by an uninterrupted opening about 43 cm. wide (fig. 21). Such a gap is too small to permit the passage of worshippers or to allow sufficient light to enter the central and east windows in the north wall of the church (fig. 22). The north wall would have been shaded if the oratory had an independent south wall. The only alternative is to assume that when the oratory was constructed its south wall was independent only at the east end and turned south to merge into the northeast corner of the church. Unfortunately, there is no visible evidence today to support this assumption; the remaining facing stones in the northeast corner of the church show no peculiar signs of adaptation (figs. 20–21).

What is clear is that the masonry techniques of the oratory differ substantially from those in the church of T'oros I (figs. 20–22). As I mentioned in the earlier report, the exterior facing stones in the oratory are comparable in quality to those in the church, though slightly smaller. Unlike the church, the oratory has no long rectangular blocks that alternate with short square ones, nor is there any subtle alternation in the height of courses. The most profound difference between the two structures is in the cores of poured mortar and rubble. The core in the chevet of the church consists of numerous small stones that are bound in thick horizontal beds of mortar (figs. 21–22). In the oratory the core is carefully filled with large, crudely

<sup>18</sup> Pölkosean, *Hačəni*, 451 ff.

<sup>19</sup> First Report, 156–61.

<sup>20</sup> Because only fragments of this chamber are visible today, it does not appear on my plan (fig. 19).

<sup>21</sup> Goshavank, *Documents of Armenian Architecture*, 7 (Milan, 1974), 6 ff; Aght'amar, *Documents of Armenian Architecture*, 8 (Milan, 1974), 32, 103–5.

cut field stones.<sup>22</sup> Frequently, these core stones are laid in diagonal patterns and their angle of tilt changes or even reverses from one course level to the next. It is also quite interesting that most of the exterior facing of the oratory is eroding at a much faster rate than the facing of the church (fig. 21). This difference in the erosion patterns probably is due to a slightly different chemical composition in the limestone masonry of the oratory and of the church. It is likely that the limestone blocks of the oratory came from a different area of the quarry than the facing stones in the church (cf. p. 136).

Concerning the question of a door in the north wall of the church, I realized in 1981 that the present gap in that wall, which has no trace of a frame or a jamb, is narrower (by approximately 20 cm.) than the doors in the west and south walls (fig. 22). After closely reexamining Gertrude Bell's photo of the interior of the church<sup>23</sup> it seems that the breach in the north wall was below the central window. When Bell took her photograph the window was plugged carefully with cut stones. The relationship between this window, the supposed door, and the oratory is unknown.

In the north wall the only extant window, which is in the east, at present shows no marks of ever having been plugged (fig. 23). The soffit of the exterior lintel in this east window is bored with holes, perhaps to accommodate some sort of swinging shutter.<sup>24</sup> The six-pointed star carved on the face of the lintel is composed of two interlocking triangles. It is flanked by half-rosettes which are divided into identical wedge-shaped segments. This lintel block is one of the few stones in the church which has been "keyed" into an adjoining block.

I located a similar lintel in the rubble near the west wall (fig. 24). On this block two rosettes also touch but they are not segmented into petals. In the center of each rosette is a cross incised within a circle; the arms of the cross are equal in length to each segment of the shaft. In the middle of the block, above the rosettes, is not a star but a cart-wheel. This fallen lintel may have decorated a window in the north or west wall. None of its corners are "keyed."

<sup>22</sup> Compare J. B. Ward-Perkins, "Notes on the Structure and Building Methods of Early Byzantine Architecture," *The Great Palaces of the Byzantine Emperors*, 2 (Edinburgh, 1958), 82–83.

<sup>23</sup> G. Bell, "Notes on a Journey through Cilicia and Lycaonia," *RA*, 7 (1906), fig. 24; also, V. Langlois, *Voyage dans la Cilicie* (Paris, 1861), 440.

<sup>24</sup> On the soffit of the lintel in the central window of the east wall there are three holes which may have supported vertical bars.

The only fragments of the dedicatory inscription still *in situ* in the north wall are above the east window (fig. 23).

In my First Report I concluded that the Armenians cut most of the ashlar masonry specifically for the church. Despite the thousands of tons of brick and well-cut ashlar in the city below, the builders chose to "recycle" only the two relieving arches for the south and west doors and the brick tiles for the vaults.<sup>25</sup> Considering that medieval masons had a penchant for building with classical spoils, the construction here is unusual and worthy of a second scrutiny. In the summer of 1981 I spent an entire afternoon studying the exposed facing stones in the church and oratory only to find a single block, in the east jamb of the south door (fig. 25), which appears to be recycled. In spite of its exposed position I had failed to notice it during my previous visits. This block is a curiosity because one side has been neatly cut to fit a huge dovetail clamp. Clamps are not used by the Armenians at Anavarza. They appear only once in Armenian Cilicia, at Sis, and there the sockets for the clamps are only one-third the size of the example in the church of T'oros I (cf. fig. 55). Since the corresponding stone is missing, it cannot be determined if the dovetail socket actually was used with a clamp to anchor an adjoining stone in the church. In the city of Anazarbus below there are examples of equivalent sockets, but only in blocks that are much larger. What appears to have happened with the jamb in the south door is simply a case of masons recutting a fragment of a block from the Late Antique city. In the church the dovetail socket was turned inward so that it would not be visible in the completed wall.

In the southwest corner of the church the fragments of a barrel vault provide valuable information about the construction techniques in brick (fig. 26). Here thin slabs of brick are laid radially in regular courses with narrow beds of mortar. The mortar is of a very fine quality, void of rock chips and potsherds. The only evidence of Byzantine brick construction in the south bailey of Anavarza is the now collapsed gate directly north of the Armenian circuit and tower B (figs. 19 and 27). For this gate the Byzantines used an *opus listatum* in which four courses of brick alternate with a single course of

<sup>25</sup> Since Anavarza Kalesi was built on an outcrop of 100 percent limestone it may have been more economical to cut the facing stones for the church on the top of the outcrop rather than bring cut stones up the steep slopes from the Late Antique city.

ashlar.<sup>26</sup> The beds of mortar separating the brick are uneven and filled with potsherds and large pebbles. A comparison of the brick tiles seems to indicate that the Armenian builders of the church of T'oros I took the Byzantine brick from the non-functional structures at the south and employed it in the vaults using an entirely different masonry technique.<sup>27</sup>

On the interior of the church the semidomes of the central apse and flanking apsidioles are constructed around oblong centers (fig. 28). This is in keeping with the Armenian tradition in Cilicia.<sup>28</sup>

Since my first visit in 1973 the deterioration of the painted plaster in the central apse has become noticeable. In 1981 the delicate foliage on the underside of the congé molding was visible only in a small area (fig. 29).

*Sis (lower terrace)—37°27'/35°48'—The Church of St. Sophia*

See *Sis* under the heading *Chapels*

## CHAPELS

*Saimbeyli—37°48'/36°05'*

When approaching the village of Saimbeyli (Armenian: Hačin) from the south, the medieval fortress is clearly visible on the right flank of the road (fig. 10, as indicated by the arrow).<sup>29</sup> The fortress wall surrounds the southern end of an oblong outcrop. The modern town of Saimbeyli is on the west side of this outcrop. The chapel is lodged in the east circuit wall and from the exterior it appears to be just another tower (figs. 30–31). The chapel is damaged severely; only the foundation of the nave is visible today (figs. 32–33). Fortunately, the apse is still standing.

Because of its condition the chapel is difficult to evaluate in terms of masonry. On the exterior of the apse there are regular courses of well-cut rusticated ashlar with drafted margins (fig. 31). On

<sup>26</sup> Unfortunately, it is impossible to date the construction of this gate. I found no evidence of brick stamps. Obviously, the gate was built before the arrival of the Armenians; see M. Gough, "Anazarbus," *AnatSt*, 2 (1952), 119.

<sup>27</sup> The only Armenian experiment in Cilicia with *opus listatum* is in the semidome of the chapel at Meydan Kalesi; see First Report, fig. 34.

<sup>28</sup> The major exception is chapel Y in the land castle at Korykos. I know of only one instance in a Greek church of Cilicia, the Querschiffbasilika *extra muros* at Korykos, where the semidomes have an oblong center. Such a design is common after the sixth century in the churches of Armenia Major; see S. Der Nersessian, *Armenian Art* (Paris, 1978), 70.

<sup>29</sup> Compare the introductory comments on the monastic church of St. James.

the average the height of each limestone block is 34 cm. and the length is 49 cm. This masonry, which is the exterior facing for the entire fort, is cut so that the inner side of each rusticated block is tapered to bind more firmly with the poured core. This technique evolved from the classical *anathyrosis* and is consistently employed in the fortifications of Armenian Cilicia. On the interior of the fort only fragments of the masonry of the nave survive at the south. These ashlar blocks have the same dimensions as the masonry on the exterior of the apse and their faces are less rusticated. All of the facing stones on the interior of the apsidal wall are missing, except for a first course of uniformly smooth ashlar. Most of the semidome is intact and shows that its smooth ashlar radiates around an oblong center. The core of the apsidal wall, which consists of large field stones in a heavy matrix of mortar, is unusually thick, no doubt because the chapel doubles as a tower.

Unfortunately, none of the tower-chapels in Armenian Cilicia has a complete roof to show how (or if) the traditional gable was replaced at the east by a crenellated parapet.<sup>30</sup> Tamrut's chapel, which is not actually a protruding salient, has a flat platform built across the top of the nave and apse (fig. 75).

Only excavations can determine the position and number of doors in the nave. On the interior there are narrow ledges near the base of the nave walls (figs. 2 and 33). Their significance is unknown. There is no indication that a ledge continues around the apsidal wall. The location and number of niches in the apse can never be determined because of existing damage. The frame for the embrasured window in the center of the apse survives only on the exterior.

It seems quite probable that the chapel (or at least its apse) was in use after the fall of the Armenian kingdom. Sometime in the first half of the fifteenth century the abandoned fort was converted into a cloister. Most of the north half of the fort's enclosure was occupied by the church of the Holy Mother of God and other buildings.<sup>31</sup> The rectangular area adjoining the west end of the chapel (H on fig. 30) is probably the rough outline of the church. Today only the foundation of the church survives (figs. 32

<sup>30</sup> Compare with figs. 1, 14, and 21 in First Report.

<sup>31</sup> There is valuable information (though frequently undocumented) on the history of this church in Pölösean's *Hačni*, 343 ff. The church seems to have undergone two periods of reconstruction and survived into the second decade of the 20th century.

and 34). The masonry of the church is extremely crude; the interior and exterior facings consist of irregular courses of uncut field stones and rock chips, with occasional sections of recycled ashlar. This ashlar appears only in the exterior facing. A poured core of fine sandy mortar binds the facing stones. Considering the alignment of these walls, the apse of the medieval chapel must have been incorporated into some part of the church. The walls of the chapel's nave were partially removed to accommodate the construction.<sup>32</sup>

Unfortunately, the photographs of the fort taken in the late nineteenth and early twentieth centuries are of very poor quality and lack some important detail.<sup>33</sup> It appears that the church of the Holy Mother of God was a domed hall structure, quite similar in appearance to the church of St. James in the neighboring monastery (cf. fig. 12). But the former seems to have been built on top of a platform (or substructure) because three low-level arched openings in both the west and east walls of the church are visible *above* the circuit wall of the fort when viewed from the valley below. The photographs also show that the hipped roof of the church was crowned in the center by a polygonal drum of stone and a cupola. Windows opened in the facets of the drum as well as in the upper levels of the west, south, and east walls of the church. The space between the west section of the circuit wall of the fort and the west wall of the church was an open court (fig. 30, north and east of tower G). A building was constructed between the north wall of H and the inner side of the northwest tower (A in fig. 30). On the interior of the north wall of the fort there is evidence of much reconstruction where this building was positioned and there are still traces of stucco and paint (fig. 34). One must have entered the western end of the church by first passing through the gate of the fort (between A and B in fig. 30) and then walking west through the adjacent building and eventually south into the open court. The lower-level rooms in the north towers were covered on the interior with stucco and paint and were integrated into the religious complex. A rectangular campanile was constructed on the top of the northwest tower.<sup>34</sup> Only the foundation of this campanile is visible today (fig. 34). South of

<sup>32</sup>On my plan (fig. 30) the perimeter of the church is not perfectly symmetrical. The corner at the southeast forms an obtuse angle. It should be stressed that my plan is drawn only from surface remains. Excavations could certainly alter the shape of the church (or its platform).

<sup>33</sup>Pölkosean, *Hačəni*, 106–07, 122, 143, and 450.

<sup>34</sup>Ibid., 741.

the church and the medieval chapel there are the remains of five graves which were scarped into the rock (E in fig. 30). These are probably contemporary with the church, as is room D.

#### Anavarza (south bailey)— $37^{\circ}15' / 35^{\circ}54'$

This small “parapet chapel” is lodged in the east circuit wall of the south bailey, southeast of building F (figs. 19 and 35; in fig. 35 building F is at the far left and the parapet chapel is right of center). The church of T’oros I is only 30 m. to the southwest.<sup>35</sup> Today only the apse of the parapet chapel survives (figs. 36–37).

Much of the east circuit, as well as building F, is essentially Byzantine construction.<sup>36</sup> During the Armenian occupation some rooms were added onto the interior of the circuit and the adjoining building F at the south (fig. 35). Most of the exterior facing from the Armenian period, which consists of large well-cut blocks of ashlar, is in sharp contrast to the poorer quality of the Byzantine masonry. The Armenians use a poorer quality stone only for the interior facing of the rooms. In regard to the parapet chapel, the interior consists of squared stones laid on their vertical axes and anchored by rock chips and mortar (figs. 36–37). This masonry has less mortar in the interstices than have the more crude Byzantine stones. Traces of plaster indicate that the apse was once stuccoed and painted. The core of the apsidal wall, which is a conglomerate of small field stones and mortar, is probably recycled fill material from the Byzantine wall.

The diameter of the apse is 145 cm. and its depth is 130 cm. The apse is pierced in the center by an embrasured window and is flanked by two low-level squareheaded niches (figs. 36–37). The niche at the north is 44 cm. in width. The south niche is badly damaged. The interior sides of both niches have been removed. It appears that the floor of the apse was fully excavated some years ago by treasure hunters. This digging exposed a socle of rather crude stones. At the level of the socle large ashlar blocks extend from the ends of the apsidal walls to mark the limit of the apse. These blocks probably formed a continuous step and the present gap in the center is merely an indication of a missing block, not a doorway. Since this step is higher than the present ground level, the floor of the apse suggests a bema. Even with the bema, the floor level of the

<sup>35</sup>Fig. 3 in First Report. In this photograph the parapet chapel is clearly visible above the oratory of the church of T’oros I.

<sup>36</sup>Gough, “Anazarbus,” 121.

chapel is substantially lower than the floor levels of the adjoining *archières* (figs. 35–36). The higher floor levels in the *archières* are necessary to facilitate shooting; their windows are three times the size of the embrasured window in the chapel.<sup>37</sup> It seems unlikely that the window in the chapel ever functioned as a shooting port in times of attack.

The most interesting feature found in the apse is that the apsidal window protrudes into the space of the semidome (figs. 36–37). Fragments of the windowsill are still *in situ* and show that the original interior height of the opening was 106 cm. The sill typically slants downward to the west. The depth of the window is 128 cm. In the south wall of the apse the first row of springing stones for the apsidal vault is still *in situ*. At first glance these springing stones seem oversized in comparison to the other remaining stones of the semidome. But this is not unusual when one compares them to their counterparts in the central apse of the church of T'oros I.<sup>38</sup> The quality of the ashlar in the semidome of the parapet chapel is also comparable to the neighboring church.<sup>39</sup> There is no cornice molding to separate the collapsed semidome from the apsidal wall. Such a decoration would have been broken by the intervening window. The Armenians probably adapted their constructions here to include the original window openings of the Byzantine east circuit. They could enlarge or contract the size of the window depending on the purpose of the adjoining structure; but what the Armenian builders could not do in the chapel was to raise the height of the semidome, for then the now collapsed wall walk behind the crenellations would have been cut off (fig. 37). The wall walk once rested on the semidome and on the barrel vaults of the flanking *archière* chambers.

The problem for which I can offer no conclusive answer concerns the position and size of the chapel's nave. Today the chapel appears to be without a nave. Such a chapel would be unprecedented in Armenian Cilicia, for it would require that services be conducted in the open. Although this is a possibility, there are two alternatives. First, the nave could have been built of wood and the supporting beams for the ceiling anchored in the wall walk above the semidome; but, since the wall walk has collapsed, no evidence of joist holes can be found. Second, there is today a wall of fine ashlar (Armenian con-

struction) which extends from the south wall of room F (fig. 35). This Armenian wall, too, has collapsed, but it may once have extended farther to the south, closing off the chapel. Unfortunately, the west walls of the flanking *archière* chambers show no signs of abutments or junctions which would have been created by crosswalls.

#### *Anavarza (central bailey)—37°15'/35°54'*

In my first report I made a brief mention of this structure. During this last season I was able to complete a formal survey of the chapel (K in fig. 19; fig. 2).

The limestone masonry of the chapel in the central bailey is far more complex than I had suspected. The facing stones consist of a curious combination of newly-cut Armenian masonry and blocks which were recycled from Byzantine structures. On the exterior the most obvious recycled pieces are the huge rectangular blocks in the foundation and the corners (figs. 38–39).<sup>40</sup> One of the quoins at the southwest (fig. 38) has a neatly shaped margin which surrounds a smooth raised face. In Armenian masonry it was typical to leave the raised center of each block rusticated, as seen in this chapel's south wall. In a few places where the margins of the quoins have broken it appears that these stones were cut with *anathyrosis*, a specific technique not employed by the Armenians in Cilicia.<sup>41</sup> The other clearly recycled pieces are the lintels (or transoms) over the south and west doors. At the west the lintel is probably the stolen segment of a cornice molding (fig. 40). The molding is very simple, consisting of a ledge which is articulated by a single string course and several indentations. The lintel in the south door is missing except for a fragment at the west (figs. 38 and 41). The fragment is of marble and is decorated with an attractive stylized flower. Aside from the foundation and quoins of the façade and the frames and lintels of the doors, the rest of the exterior facing, including the relieving arches above the doors, is of Armenian construction.

The lower half of the exterior walls is of rusticated masonry of various qualities. The blocks vary greatly in size but on the average they are 41 cm. in length and 28 cm. in height. The rusticated blocks that have neatly drafted margins are confined gen-

<sup>37</sup> Fig. 3 in First Report.

<sup>38</sup> *Ibid.*, figs. 3 and 6.

<sup>39</sup> The *archière*-chambers adjoining the parapet chapel are covered simply by barrel vaults of crude stones (fig. 36).

<sup>40</sup> This is one of the few chapels where the ground level has not risen significantly, thus the sills of the doors are exposed.

<sup>41</sup> Normally, the Armenians taper the four inner faces of each block to permit a firm bond with the poured core. Compare the comments on the masonry in Saimbeyli's chapel.

erally to the upper two courses of the lower half. The other rusticated blocks are without drafted margins. Since their edges do not meet perfectly, beds of mortar and rock chips are used to seal the irregular interstices. The builders also used the neatly drafted blocks for aesthetic effect in doorways, where only the center stone on the exterior of the jambs has a rusticated face (fig. 38). The paucity of rusticated blocks with drafted margins is probably the result of limited building funds. Another interesting feature in the lower half of the façade are the two shallow niches in the west wall (figs. 38 and 40; not shown in fig. 2). These rectangular holes are not windows, nor are they the result of blocks having been pried away, for they are framed neatly by the surrounding facing stones. Undoubtedly, decorative plaques were once held in these openings. While their removal is unfortunate, it does give us a clear view of the interior of the core.<sup>42</sup> It does not appear to be neatly layered, but is merely a jumble of small field stones, mortar, and potsherds. No brick is visible either in the core or the facing.

The upper half of the façade is one of the most interesting constructions in Cilicia (figs. 38–40 and 42). Here smooth rectangular blocks, roughly one-half to one-third the dimensions of the stones below, have been carefully cut and aligned. Each stone is anchored into position by a narrow layer of mortar and occasional rock chips. The quoins from the lower level have been carried all the way to the top to anchor the walls. In the north, east, and south walls the stones in the first course have been laid vertically. Above this the courses continue with a subtle and interesting alternation in the height and alignment of stones which harken back to the archaic period in Armenian ecclesiastical architecture.<sup>43</sup> The most attractive quality about this masonry is that the color of the limestone in the top half differs from that in the bottom half. In the west, south, and east walls the limestone in the upper half is darker (with a few exceptions) than in the lower half (figs. 38 and 42). However, in the north wall the arrangement is reversed, with a light top half and a darker bottom. Depending on the time of day and the weather conditions, the effect can be most dramatic, especially when viewed from the northeast (fig. 39).

Apart from the two well-executed relieving arches

<sup>42</sup> On the interior of the chapel holes in the south wall of the nave and in the center of the apse reveal an identical core.

<sup>43</sup> F. Gandolfo, *Aisleless Churches and Chapels in Armenia from the IV to the VII century* (Rome, 1973), 176–77, fig. 72.

over the doors, the only other opening in the upper level is the now shattered apsidal window (figs. 39 and 42). The exterior side of the sill is clearly visible in a notched portion of a rectangular block. Part of the window's upper frame is also visible. This embrasured window is not centered in the wall, but constructed askew. Of great importance are the vertical notches near the top of the south and west walls (figs. 38 and 40). These once held wooden beams which supported the roofs of adjoining rooms. Because nothing remains of these rooms built of wood, their plans and functions are impossible to determine.

The only evidence of Armenian relief sculpture in this chapel is on the exterior of the west door (fig. 40). Here two crosses or *xačkars* on each side of the relieving arch are cut in bas-relief. This arrangement in the wall appears haphazard, but it is typical of Armenian chapel construction.<sup>44</sup>

On the interior of the chapel the masonry scheme is quite similar to that of the exterior (figs. 43–45), although all the ashlar is relatively smooth and the color changes in the limestone are most noticeable in the apse. In the nave the horizontal division between the two sizes of smooth ashlar is quite clear. The interior sides of the south and west doors were both covered by vaults set at a lower level than the exterior relieving arches (figs. 40, 43, and 46). Both of the interior vaults have collapsed. The two springing stones for the vault of the south door are still *in situ* (fig. 43). In the west door only the springing stone at the north survives (fig. 46). Because the springing stone on the south side of the west door is missing, a square dowel hole is visible on the inner side of the lintel. This hole connected to a horizontal support when this "lintel" originally functioned as a cornice in a Late Antique building. The soffit of the lintel is raised behind the jambs and drilled with two holes to accommodate the pivots for double wooden doors.

Since the nave has no windows, it is likely that the tympana formed by the relieving arches over the two doors were capable of being opened to allow for ventilation and light. The springing stones for the barrel vault that once covered the nave are still visible along the north and south walls (figs. 41, 44, and 46). The only other prominent feature in the nave is a roundheaded niche in the north wall, near the junction with the apse (fig. 45). It is set in the wall at a lower level than the apsidal niches

<sup>44</sup> P. Cuneo, *The Basilicae of T'ux, Xncorgin, Pašvack, Hogečank* (Rome, 1973), figs. 50, 51, 55, 56, 71, 72.

(fig. 44) and has a monolithic base, now broken, which has been hollowed out into a dish. This is similar to the corresponding niche at Çardak, although in the latter the niche base has a drainage hole and a protruding scallop decoration. Here at Anavarza the area opposite the north niche in the south wall does not have a compartment, but a large hole in the south wall may once have held a niche (fig. 2).

The only area of this chapel that has deteriorated since my first visit in 1973 is the apse (fig. 44). At that time more of the apsidal vault was standing. Today most of the first two courses of the semidome are *in situ*. The ashlar of the semidome is of very high quality with narrow margins. What I had earlier thought to be fragments of painted stucco on the semidome, on closer examination turned out to be traces of a deteriorating core which was oozing through the interstices of the facing stones. It is quite possible that the entire apse, as well as the nave, was left undecorated. A very handsome tapered molding, which boldly projects more than 19 cm., separates the apsidal wall from the semidome. In the apsidal wall two round-headed niches flank the window. The sill of the window, which is still *in situ*, clearly indicates that this embrasured opening was angled slightly to the south.

*Sis (lower terrace)—37°27'/35°48'*

When I published my survey of the lower terrace at Sis in the First Report my intent was merely to describe the architecture and avoid any speculative conclusions about the history of individual buildings or their connection with the surrounding wall. When I returned to the lower terrace in 1981 I had not only sufficient time to complete a photographic survey of Kara Kilise, an Armenian chapel at the south end of the terrace, but also to reflect on the origins of the cloister's circuit wall and the buildings on the terrace.

At the outset I should apologize for not enlarging my plan of the lower terrace (fig. 24 in the First Report). The problems of surveying the lower terrace at Sis are complex. There are at least two distinct periods of Armenian construction. The first can be dated to the thirteenth century and the second to the eighteenth and nineteenth centuries.

### The Thirteenth Century

During the reigns of King Levon I (1198/99–1219) and his eventual successor King Het'um I (1226–1270) a residential complex was constructed

at this site. According to both medieval and nineteenth-century accounts, this complex consisted of ascending terraces which were encircled by a fortified wall.<sup>45</sup> Wilbrand of Oldenburg mentioned the magnificent gardens therein.<sup>46</sup> Water was supplied by two natural springs, one of which now supplies the modern reservoir on the terrace. One of the principal structures on the interior of the complex was the Tarbas or palace, which was a multi-storied circular building with three ground-level doors surmounted by windows. In 1852 Victor Langlois found no evidence of this palace, but only an "enceinte carrée" which, he believed, once enclosed a number of small buildings.<sup>47</sup> Three of the four corner towers of this square structure are standing today and appear as A on the plan of the lower terrace (see fig. 24 in the First Report).<sup>48</sup> Contrary to the conclusion of one modern commentator,<sup>49</sup> A cannot be the Tarbas, but in all likelihood it contained the treasury and mint of the Armenian kingdom and was undoubtedly the donjon or place of final retreat within the complex. It is interesting that A is built exclusively with mortar and rusticated ashlar (fig. 47) while the now vanished Tarbas, according to one report,<sup>50</sup> was built of finely cut ashlar of cyclopean dimensions. These huge blocks were joined not merely with mortar, but also with clamps and lead.

The walls of donjon A are typical of the military architecture of the medieval kingdom except that there is no inner facing to complement the outer (figs. 47–48). When the core of A was originally poured a falsework of wood was erected on the interior to support the mass in its liquid state and was later removed after hardening.<sup>51</sup> There is evidence that horizontal headers of wood were inte-

<sup>45</sup> Wilbrand von Oldenburg, *Peregrinatio*, II.21–22; Alishan, *Sissouan*, 246–48; E. J. Davis, *Life in Asiatic Turkey* (London, 1879), 154–55; and V. Langlois, "Voyage à Sis," JA, ser. 4, vol. 4 (1855), 268–73.

<sup>46</sup> Wilbrand, *Peregrinatio*, II.22.

<sup>47</sup> Langlois, "Sis," 270.

<sup>48</sup> There is a possibility that the northwest tower of A does not form the northwest corner since a small portion of the donjon's north wall seems to extend west beyond the tower. It is clear that A is rectangular. See figs. 47, 48, 52.

<sup>49</sup> Hellenkemper, *Burgen*, 210. Alishan (*Sissouan*, 246–47) notes that there was some confusion among the 19th-century residents of Sis about the actual nature of the Tarbas.

<sup>50</sup> Alishan, *Sissouan*, 246 ff.

<sup>51</sup> The impressions of horizontally placed wooden planks are visible on the interior of A. Strangely, there is no indication on the interior side of the donjon (fig. 48) where the floor levels were located; normally, joist holes would indicate the height of each story. A small molding on the interior of the northeast tower, just above ground level, may have supported the ceiling of a basement level.

grated into the core when it was poured. The only extant windows in the donjon are extremely narrow slits near the base and top of the east wall (fig. 48). The interior frames of the windows are constructed with fine ashlar blocks. If these square-headed openings are typical, then the donjon would not be appropriate as the royal residence. The number and location of doors and the nature of the covering over A are unknown. Today the two east towers stand to over 12 m. in height.

Directly west of the donjon are two medieval (?) revetment walls which support an upper terrace. The lower of the two walls, which is deteriorating rapidly, is 15 m. in length and undoubtedly connected with a section 20 m. to the south. The lower wall actually supports the east flank of a narrow road that runs below salient C (fig. 49). The road skirts the base of the upper revetment wall attached to C and today is used by the custodians of the reservoir. The upper revetment, which is the westernmost of the two walls, is actually anchored on a foundation of rock and displays many building periods. A 12-m. section directly south of salient C (fig. 49) is composed of the rusticated blocks so typical of medieval Armenian architecture (figs. 47–48). A fine vertical seam separates this section from the southern continuation of the wall which consists of field stones bound in a thick matrix of mortar. Directly north of salient C the walls are made of relatively smooth well-cut ashlar blocks which are framed by wide beds of mortar. There is a thin horizontal chase almost midway in the face of this wall. Like similar features in the apartments at Çandır and the chapel at Kız (near Gösne) the chase is almost as deep as the facing stones and probably held a wooden beam. The wood may have been decorated but its real function was to give some elasticity to the walls during an earthquake. Salient C was actually added at a later building period because its rough ashlar blocks, which do *not* have prominent margins of mortar, overlap the rusticated stones and are not anchored to the wall face. It seems likely that all four types of masonry in the upper revetment wall represent different periods of construction. Since the ashlar in tower C and the crude field stones of the southern extension resemble the masonry near tower D (cf. fig. 50), they may belong to the eighteenth and nineteenth centuries.

To the northwest of A there is a freestanding wall which flanks the east side of the access road. This wall, which is pierced by one straight-sided window at point B (see fig. 24 in the First Report), has

some rusticated masonry and may partially date, like the wall flanking salient C, to the period when the palace complex was built. This freestanding wall is probably the most northerly extension of the terrace complex. The height of the different terrace walls varies from 2 to 8 m. Because of extensive damage the location of the original entrances into the terrace complex cannot be determined.

Along with the walls of the terrace and the Tarbas, the most important structure that was mentioned in the residential complex of the Armenian kings was the church of St. Sophia. No doubt its builder, Het'um I, had Justinian I in mind when naming the principal basilica of his capital. Although no descriptions of Armenian churches have survived from the period of the medieval kingdom, historians in the nineteenth century claim that St. Sophia was constructed carefully like the palace with huge ashlar blocks joined by lead.<sup>52</sup> In these same reports it is mentioned that Het'um's cathedral was a triple-apsed hall church with a flat roof covering barrel vaults and an adjoining steeple. As I shall show in detail below, St. Sophia was rebuilt in the eighteenth and nineteenth centuries as the church of St. Gregory the Illuminator; today parts of the foundation of the original church are still visible. In 1266 the entire residential complex of the Armenian kings was plundered and partially burnt. Throughout the first half of the fourteenth century it suffered the ravages of repeated raids. The lower terrace was abandoned after the fall of the Armenian kingdom in 1375. It was reported that the Saracens who settled in Sis extracted the lead from the Tarbas and church in the lower terrace.<sup>53</sup>

#### The Eighteenth and Nineteenth Centuries

In 1734 the Patriarch Lukas received permission to build a monastery and church in the area of the lower terrace. This seems to mark the beginning of the second major period of Armenian construction in this area. Lukas, who dedicated his church to St. Gregory the Illuminator, was entombed near one of its three altars. By the mid-nineteenth cen-

<sup>52</sup> Alishan, *Sissouan*, 246 ff; and Langlois, "Sis," 269–70. The descriptions of St. Sophia from 19th-century travelers are based on the appearance of the reconstructed church, conversations with the clerics who resided in the compound of the Patriarchs, and certain documents which are now missing. The references in the medieval chronicles to St. Sophia at Sis (as opposed to St. Sophia at Tarsus) are few in number and brief; see: Het'um of Kotikos, *RHC, Doc. Arm.*, I, 485–87; Dardel, *RHC, Doc. Arm.*, II, 66; and Smbat, *La Chronique attribuée au Connétable Smbat*, trans., G. Dédéyan (Paris, 1980), 114.

<sup>53</sup> Alishan, *Sissouan*, 246–47.

tury the church may have been converted into a school of the Armenian language. In 1810 the Patriarch Kirakos moved his residence and administrative center onto the site of the royal palace. This indicates that the Tarbas was destroyed at least forty years before the observations of Langlois. Although some medieval spoils were used in the construction, the Patriarch's house and council chamber were said to be built entirely of wood. Kirakos surrounded his residence, the monastery, and nearby religious structures with a fortified wall that is roughly triangular in plan. The base of the triangle is at the east (the area depicted in fig. 24 in the First Report) and the two other sides, which ascend the terrace in a northwesterly and southwesterly direction, meet about one third the distance up the outcrop where they form the apex of the enclosure (fig. 51).<sup>54</sup> Substantial portions of these ascending walls still survive as do the stone foundations of buildings in the west half, but they do not appear on my plan. Since the upper or west half of the terrace has been bulldozed to accommodate a forestation program, a substantial effort will be required to survey the rest of the enclosure. Even on my existing plan (fig. 24 in the First Report) modern structures probably cover features which should be represented.<sup>55</sup>

The wall built at the time of Kirakos may be smaller than the original palace-circuit since the ruins of donjon A and part of the wall at point B (fig. 24 in the First Report) are outside this new compound (fig. 52). At the east the principal remnant of the new circuit is the polygonal tower D and the walls attached to it. The wall extending directly west from D rises abruptly and joins the medieval (?) revetment on the east flank of the service road, just southeast of C. Immediately before the junction with the revetment, a small stairway is

<sup>54</sup> Photographs showing the entire compound of the Patriarchs can be found in the publications by Alishan (*Sissouan*, 248); E. Lohmann (*Im Kloster zu Sis* [Striegau, 1905], 2); and Hellenkemper (*Burgen*, pl. 49a). Today all the wooden buildings inside the compound have disappeared.

The general triangular shape of the cloister-circuit is depicted dramatically in the etching first published by Victor Langlois (*Voyage dans la Cilicie* [Paris, 1861], p. 126, pl. 4) and reproduced here as fig. 51. Much of the flora and many of the minor buildings are missing because of the artistic conventions of that period.

For a detailed history and description of the Patriarch's residence, see M. K'elésean, *Sis-Matean* (Beirut, 1949), 226 ff.

<sup>55</sup> Directly below (east of) donjon A is what I believe to be a very modern revetment wall. It is clearly depicted in Hellenkemper's photo (*Burgen*, pl. 49b). I intentionally did not survey this wall.

attached to the north face of the ascending wall. The revetment originally continued north to complete this half of the east wall. The section of the east wall extending south from tower D (fig. 50) runs for about 20 m. before breaking off. The far south end of the east wall is still preserved (though not shown in fig. 24 of the First Report; it is visible in the lower right of fig. 53), revealing that the entire (undamaged) section south of D was once about 95 m. in length and ran in a straight line before turning sharply to the west. When the entire circuit was still preserved in the early 1940s, there was evidence of at least one other tower south of D (fig. 54, lower right; cf. fig. 51). This tower appears to be a semicircular bastion.

The extant section of wall south of D shows today two major periods of construction (fig. 50). The lower 60 percent of the wall consists of a rough-faced but flat ashlar with relatively narrow margins. Some of the exposed faces of this masonry have weathered to an unusually high degree. This may indicate that the stones were from different quarries or that a portion of the stones were recycled from medieval structures. This ashlar, which continues around tower D to the west, does not form a curved surface on the tower, but actually creates a polygonal face. The upper 40 percent of tower D and the flanking walls consist of crude field stones and occasional courses of cut stone bound in a heavy mixture of mortar. This crude masonry rises on the irregular breaks in the top of the ashlar wall. Photographic evidence shows that most of the now missing section of this wall at the south was built with crude masonry (fig. 54). Considering that the cores of the two types of masonry are slightly different, it is likely that the upper masonry is a later addition or a repair. It is interesting that the crude stones in the upper part of tower D do not continue the polygonal shape, but form a curved surface. Polygonal towers are unknown in the Armenian architecture of medieval Cilicia. The circuit wall of the Patriarchs is remarkable for the variety of masonry techniques employed and its eclectic adaptation to the medieval circuit.

To gain a better understanding of the contributions of the modern Patriarchs in the development of the lower terrace we must determine who is responsible for the erection of buildings E, F, and G (fig. 24 in the First Report) and what shape these structures had. As I mentioned in my earlier report, E and F are constructed with large blocks of smooth ashlar which are bound by dovetail clamps

and lead. Most of these ashlar blocks have a single lateral clamp to bind the inner and outer facing (fig. 55; also fig. 25 in the First Report). In the north wall of E occasional longitudinal clamps bind the ends of the blocks in the same course (fig. 56). This technique is found nowhere else in Armenian Cilicia. According to our sketchy reports the church of St. Sophia was built like the Tarbas with lead acting as the binding agent of the masonry. Since no comparable multiapsed structures have been found in the compound of the Patriarchs, I believe that the present remains of E and F constitute the north apsidiole and the central apse of the original St. Sophia.

In my First Report I recognized that E and F were contemporary,<sup>56</sup> but I discussed them as separate units (i.e., chapels) because the now collapsed wall dividing them was unusually long (fig. 57; fig. 24 in the First Report). There is no evidence that a door opened in this wall immediately east or west of the staircase to the underground crypt. Since the chamber of the north apsidiole is exceptionally long, the ground plan of the chevet of St. Sophia differs from those of the east ends in the churches of T'oros I at Anavarza and of the Constable Smbat at Çandır. It seems certain that a south apsidiole once existed because the exterior of the south wall of the central apse is very jagged and broken precisely where a third apse would be attached. Unfortunately, a landslide (?) has removed completely all evidence of construction south of the central apse. Apart from the foundations of E and F there are no visible remains to tell us about the general shape or plan of the church. Alishan implies that the extensively reconstructed church of St. Sophia had a plan similar to Het'um's original church.<sup>57</sup> We know that on 30 August 1810 Patriarch Kirakos completed reconstruction work on the church

<sup>56</sup> The platform below E and F is also the result of one period of medieval construction. Rusticated and smooth ashlar are combined on the east face of the platform for purely aesthetic reasons (fig. 26 in First Report).

<sup>57</sup> Alishan, *Sissouan*, 253 ff. As in the church of T'oros I at Anavarza, the inspiration for the plan of Het'um's church may have come from the Byzantine churches in Cilicia (e.g., the north church at Korykos, surveyed by J. Keil and A. Wilhelm, *Denkmäler aus dem Rauhen Kilikien*, MAMA, III [Manchester, 1931], 119).

In his description of the original church of St. Sophia Father Alishan says that the basilica was erected "à plafond plat." Yet, in the medieval chronicle of Het'um of Korikos (*RHC, Doc. Arm.*, I, 485) it is mentioned that this church had a cupola. It is quite possible that Alishan's assessment is based on documents which are not available today. The exact nature of the ceiling over this church will always be in doubt.

of St. Sophia and, according to Alishan, dedicated it to St. Gregory the Illuminator and placed therein his marble throne.<sup>58</sup> There is some confusion in our nineteenth-century accounts as to whether this church is distinct from the church of St. Gregory the Illuminator built at Sis in the preceding century by Patriarch Lukas.<sup>59</sup> It is possible that both Patriarchs are responsible for rebuilding St. Sophia. For this reconstructed church we have a substantial body of evidence which consists of the descriptions of eyewitnesses and photographs taken before 1945.<sup>60</sup> An examination of this evidence, as well as of any physical remains, may shed more light on the plan of Het'um's original church.

Unfortunately, the church of St. Gregory the Illuminator was demolished over twenty-five years ago. Today the only physical evidence we have for the rebuilt church is the crypt and bema of the central apse (F, fig. 24 in the First Report) and a few facing stones from the south wall of the nave. The subterranean crypt and its entrance are constructed with a very smooth ashlar (fig. 57). Generally, the blocks of this masonry are slightly smaller than the stones in the apsidal walls of E and F and there is no evidence of dovetail clamps. The ashlar of the crypt has a poured core and no visible signs of mortar in the interstices. This is quite unlike the masonry in the south wall of chapel G (fig. 28 in the First Report). The ceiling of the crypt supported the high bema of the central apse. Today it appears that the floor level of the north apsidiole is at least one meter below the floor level of the central apse (figs. 55–57). Just how much more of the original church of St. Sophia was destroyed with the demolition of St. Gregory the Illuminator cannot be determined. It is possible that what presently survives of St. Sophia served as the foundation for the reconstructed church. That the work undertaken by Patriarchs Lukas and Kirakos was extensive is made clear by Langlois' comment: "Le

<sup>58</sup> Alishan, *Sissouan*, 249 ff. Both Alishan and Langlois mention the inscription which records the rededication of St. Sophia during the reign of Patriarch Kirakos. Langlois ("Sis," 280) says that only one chapel in the church of Kirakos was dedicated to St. Gregory the Illuminator.

In the second half of the 19th century and the first two decades of the 20th this church is often called "The Church of the Mother Monastery" (K'elesean, *Sis-Matean*, 164–66 and 743–44).

<sup>59</sup> If the church of Patriarch Lukas was converted into a school this may explain why we hear of two churches called St. Gregory the Illuminator.

<sup>60</sup> The best eyewitness descriptions come from Langlois, Alishan, and Davis.

choeur est antique, tandis que le reste de l'édifice est une construction moderne. . . ."⁶¹

The accounts of nineteenth-century travelers provide our earliest evidence for the plan of St. Gregory the Illuminator. Father Alishan says that the church was a long building whose roof appeared flat on the exterior.<sup>⁶²</sup> Langlois mentions that the nave of the church was divided into three units. He also reports that the flat roof of the church was supported by four square piers which were connected by vaults. In the chevet the lower-level apsidioles were each topped by second-level chapels. These upper-level apsidioles were equipped with altars and reserved for female worshippers. Attached to the exterior was a tall square steeple whose daily chimes caused the local Turks to name the church Tchanglé-Kilissé (*sic*). Gargoyles in the form of lions decorated the exterior angles and the top of the church. The nineteenth-century commentaries on the general state of the church and its decoration and treasures are quite interesting.<sup>⁶³</sup>

The mid-nineteenth century etching showing the Patriarchs' compound (fig. 51) also provides valuable information on the plan of the church of St. Gregory the Illuminator.<sup>⁶⁴</sup> This church, as viewed from the east, is represented on a scale far larger than its physical reality. Because of this exaggeration, a number of significant features on the rectangular façade are portrayed. A single window pierces the apsidal wall in each of the four apsidioles. At the lower level of the central apse there are three windows and near the top of this apsidal wall there is a single large circular window. In rendering the central apse the artist tried to show its bold projection to the end of the platform by rounding off the top of its wall. It is clear that the south apsidiole, which is depicted like the one at the north, is also preceded by a talus at the east (cf. figs. 24 and 26 in the First Report), giving the edge of the platform a crenellated appearance in the etching. The bell tower is attached to the south face of the south apsidiole. Considering the angle of view in the etching it is likely that the exposed corner of another building, which appears southwest of the

<sup>⁶¹</sup> Langlois, "Sis," 280.

<sup>⁶²</sup> The other Armenian hall church in the Cilician plain, the church of T'oros I at Anavarza, also has a relatively flat roof. The high pitched roofs and tall conical drums, which effectively displace snow on the churches of Armenia Major, would have no practical value in the temperate climate of the plain. See note 57 *supra*.

<sup>⁶³</sup> Alishan, *Sissouan*, 254; Davis, *Asiatic Turkey*, 154–56; and Langlois, "Sis," 282–84.

<sup>⁶⁴</sup> See note 54.

bell tower, is a poor representation of chapel G. The most striking feature on the façade of the church are four huge pilasters which rise from the east edge of the platform to the height of the cornice. This east edge, which is articulated by two taluses, is about one meter in width. The outer pilasters at the extreme northeast and southeast are defined by these taluses. The pilasters flanking the central apse rise on the opposite side of the east taluses.

Photographs taken before the demolition of the church of St. Gregory the Illuminator furnish the most precise information on the plan. Two photos of the east façade, one taken before 1919 (fig. 52) and the other during the Second World War (fig. 54),<sup>⁶⁵</sup> show that the two outer pilasters are well-defined while the inner ones are no more than thin strips which outline the limits of the protruding central apse. The outer pilasters have a rounded appearance, as if they were engaged columns (cf. fig. 53). Their bases are definitely square (fig. 56). The three windows in the lower half of the central apse are roundheaded and tall (cf. fig. 58).<sup>⁶⁶</sup> A single horizontal molding runs across the central apse just above the three windows. Unlike the flat roofs over the upper-level apsidioles, the covering over the central apse consists of a slightly raised and gently tapering gable.

A 1943 photograph of the church taken from the west shows that the nave had collapsed sometime after 1919 (fig. 58).<sup>⁶⁷</sup> The fully exposed chevet reveals that the semidomes of the apsidioles have slightly pointed apices, while that of the central apse is rounded (cf. the church of the Constable Smbat at Çandır and the monastic church of St. James at Saimbeyli). In all four of the apsidioles the diameters of their apses are less than the widths of their flanking rooms (cf. E on fig. 24 in the First Report). At the west end of the central apse the diameter of the apsidal wall is increased creating small jogs.<sup>⁶⁸</sup> These jogs define and reduce the thickness of the walls separating the central apse from the apsidioles. All five of the semidomes are separated

<sup>⁶⁵</sup> These photos, as well as figs. 53 and 58, are rather grainy and of poor quality. Figs. 52–54 and 58 were reproduced from K'eléšean's *Sis-Matean* (226 and 749–54).

<sup>⁶⁶</sup> Similar windows open in a medieval apse in the castle which stands above the Patriarch's compound (fig. 30 in First Report).

<sup>⁶⁷</sup> There is a second photograph of the interior of the church in K'eléšean's *Sis-Matean* (pl. 1, p. 750).

<sup>⁶⁸</sup> These jogs are not apparent today in the foundation of the central apse (fig. 24 in First Report). This subtle expansion of the apsidal wall occurs at only one other site in Armenian Cilicia: chapel Y in the land castle of Korykos (fig. 42 in First Report).

from the apsidal walls on which they rest by cornice moldings. These moldings also articulate the walls of the nave. It seems probable that wooden galleries gave access to the wide, open upper-level apsidioles. Substantial portions of the vaults over these galleries are visible atop the surviving sections of the north and south walls of the nave.<sup>69</sup> The plan of the nave is quite similar to the one in the church of T'oros I at Anavarza. In both cases the nave was divided into three parallel units by two rows of piers. Each of these units was covered by a separate longitudinal vault. The church of St. Gregory the Illuminator differs in that the vaults over the flanking aisles and central nave are not elevated above the levels of the semidomes by dia-phragm walls. The roof has a tripartite appearance on the exterior because of the very small gable that is constructed only over the central barrel vault.

It is very difficult to determine the length of the nave. The 1943 photograph (fig. 58) shows that the south wall of the nave, which adjoined the north wall of chapel G (fig. 24 in the First Report), was preserved to the west end of that chapel. Prior to the 1940s a revetment wall, which supported an ascending level of the terrace, rose abruptly in the area west of the church-chapel complex.<sup>70</sup> It appears that this wall was about 15–20 m. west of the west end of chapel G. It is possible that the nave of the church extended to the base of this revetment wall. As a result of extensive regrading and erosion, most of this revetment has disappeared today (fig. 59, top). In 1974 there was no evidence of the north wall of the nave beyond the foundation of the north apsidiole. In the late 1950s a modern and partially subterranean reservoir was constructed in the space once occupied by the nave of the church. Only a small section of that reservoir protrudes above the present ground level, in the area immediately west of the north apsidiole (fig. 24 in the First Report). A narrow cement walkway (not shown on my plan) separates the exposed section of the reservoir from the remnants of the north apsidiole (fig. 56, bottom right). When this cistern was constructed in the excavated nave and covered with a roof and layer of topsoil, the chevet was isolated from the body of the church (figs. 55 and 60).<sup>71</sup> The stairway visible on the south side of the church

of St. Gregory the Illuminator (fig. 27 in the First Report, at the left) was added to facilitate access to the top of the reservoir. Because the soil atop the reservoir has settled and shifted over the years, the exact perimeter of the reservoir's roof cannot be determined. On my plan (fig. 24 in the First Report) the sloping sides of the reservoir mound are depicted as three curving contour lines west of F.

We have no exact information on the nature of the buildings which were north of the church of St. Gregory the Illuminator. The wall extending from the north wall of E is a revetment on which a freestanding wall rises. In the mid-nineteenth-century etching of the compound (fig. 51) there are at least two domed structures immediately to the north of the church of St. Gregory the Illuminator. These very typical Armenian buildings have polygonal drums topped by either conical or pyramidal roofs. Today no trace of the two domed structures at the north end of the revetment wall survives, but merely part of the foundation for a large building. In the pre-1919 photograph of the compound (fig. 52) there are a number of multi-storeyed rectangular buildings but no evidence of drums or cupolas.<sup>72</sup> These buildings are said to be part of the residential section of the monastery.

On the south side of the church of St. Gregory the Illuminator the photographs from 1943 (figs. 53 and 58) show chapel G and the adjoining bell tower in a relatively good state of preservation. The bell tower, which is attached to the south wall of the church and the east wall of chapel G, was constructed at the same time as the church. In the first floor of the bell tower there is a small chapel dedicated to St. Peter and St. Paul.<sup>73</sup> The upper half of the tower, which is entered from the south gallery of the church (just west of the upper-level apsidiole), contains the chimes.

Chapel G, which is dedicated to St. Ejmiacin, is a mid-nineteenth-century construction.<sup>74</sup> The photographs reveal that an octagonal drum supports the cupola over the east bay of the nave. The south, east, and west facets of the drum are each pierced by a roundheaded window. The exterior junction of each facet is articulated by a molding. The almost domical roof is formed by eight curving facets. The facets of the roof are not articu-

<sup>69</sup> There are also indications that the nave walls are pierced by a number of squareheaded and roundheaded windows (fig. 53). Also see: K'éléšean, *Sis-Matean*, pls. 1 and 3, p. 750.

<sup>70</sup> K'éléšean, *Sis-Matean*, pl. 4, p. 749.

<sup>71</sup> Presently, the rather flat dirt layer over the reservoir is 1.2 m. above the level of the chevet and devoid of shrubbery.

<sup>72</sup> In Lohmann's earlier photo of the compound (*Kloster*, 2) drums are also absent at this end. In the 1943 photograph (K'éléšean, *Sis-Matean*, pl. 2, p. 749) only crumbled foundations are visible.

<sup>73</sup> K'éléšean, *Sis-Matean*, 744.

<sup>74</sup> *Ibid.*, 743–46.

lated by vertical moldings but are separated from the drum by a flat protruding cornice. The west bay of the nave is covered by a single barrel vault, which on the exterior has a perfectly flat roof. The chapel has one door in its west wall and at least one door in the north. The west door is extremely ornate. It is flanked on the exterior by at least two engaged columns and is surmounted by decorative arches which are deeply set in the thickness of the wall. Just above the outermost arch is a horizontal molding.

During my reexamination of chapel G in 1981 I was able to make a number of new observations. In the east bay of the nave it appears that recent digging has uncovered a crypt below floor level. Because of debris and shrubbery it is impossible to determine the dimensions of this chamber. On the interior face of the north wall of the nave, near the salient corner of the apse wall (fig. 59) I noticed that some fine ashlar blocks, which are not present in the corresponding area of the south wall of the nave, once framed a large opening (probably a door). Two courses above floor level fragments of this smooth ashlar appear to be indented and outlined by a delicate stringcourse. Below these ashlar stones there is the crude socle of the foundation. Immediately northwest of this extant section of ashlar recent digging revealed the large foundation-stones of the south wall of the church of St. Gregory the Illuminator. Beyond this foundation, at the north, the ground level rises abruptly until it reaches the relatively flat top of the reservoir (figs. 59–60).

On the exterior of chapel G two distinct types of ashlar seem to have been used as facing. As I described in the First Report, the south wall is faced with a smooth ashlar, much of which may be carefully recycled stone (fig. 53). This masonry abruptly stops after extending around the southeast corner (figs. 55 and 61). The exterior of the east wall as well as the east end of the north wall appear to have been stripped of almost all their exterior facing (figs. 60–61). Remnants of some facing stones are visible at the base of the northeast corner and show that here the ashlar facing is quite different from the stones in the south wall of chapel G. The former consist of huge, uniformly smooth blocks measuring on the average 80 cm. in length, 35 cm. in height, and 42 cm. in depth. A close reexamination has now revealed that this masonry is actually the exterior facing of the south wall of the church of St. Gregory the Illuminator and the west wall of the bell tower (fig. 53). The architects who added chapel G to the completed church and bell

tower simply poured the core for the north and east walls of the chapel onto the exterior facing of the church and bell tower. This explains the neat horizontal striations that were revealed on the core of the east wall of chapel G (fig. 61) when the church and bell tower were demolished. Since the east wall of chapel G was longer than the west wall of the bell tower, the protruding southeast corner of the chapel was faced with the same type of masonry as the south wall (figs. 55 and 61).<sup>75</sup> The solid west wall of the bell tower, which functioned as the exterior facing for most of the east wall of G, prevented the construction of an apsidal window in the chapel.

In the First Report I assumed that the freestanding mass of masonry directly east of the present chapel G was part of a circuit wall (figs. 55 and 60; fig. 24 in the First Report). It now seems certain that this masonry is a remnant of the bell tower. As in the masonry in the crypt of apse F and at the base of the northeast corner of chapel G, there is no evidence that dovetail clamps were used or even that earlier stones with clamp sockets were reemployed. Thin beds of mortar and a poured core bind the stones. This finely cut ashlar of the reconstructed church and bell tower is in sharp contrast to the exterior facing of the drum and of the south side of chapel G (fig. 53). This is surprising, considering that chapel G was added no more than thirty years after the dedication of the church of St. Gregory the Illuminator.

#### Kara Kilise

About 150 m. south of chapel G and outside of the compound of the Patriarchs there is a chapel which conforms by its masonry and plan to the established paradigms for the medieval chapels of Armenian Cilicia (fig. 55: arrow shows the location of the chapel).<sup>76</sup> There are no inscriptions nor references in Armenian texts which give the date of construction or the name of this chapel. We have no evidence to show that this structure, which is called Kara Kilise by the local inhabitants, was ever enclosed in a protective circuit. The slightly pointed vault over the nave of the chapel is in perfect condition and remnants of a gabled roof can be seen at the west and east ends (figs. 62–63). Except for the damaged west façade the chapel is in a remark-

<sup>75</sup> On fig. 53 the protruding southeast corner of chapel G casts a shadow on the south wall of the bell tower.

<sup>76</sup> At present no commentary has been published on this chapel. Hellenkemper (*Burgen*, pl. 50a) published only one photograph of the chapel taken from the north.

ably good state of preservation. The wall attached to the northwest corner of the nave is of recent construction (figs. 62 and 64). Because the chapel was built on a descending terrace below the castle, a platform was constructed to bring the apse to the same level as the west end of the nave (figs. 63–64). At the east end the platform has eleven stone courses, which gradually disappear at the west.

The masonry of the platform is distinctly different from the exterior facing of the chapel in that it has large rusticated blocks whose crudely trimmed margins have been plugged with rock chips and stuccoed with broad strips of mortar (fig. 63). The corners of the platform have quoins, some of which have a bossed center with neatly trimmed margins. Above the platform the exterior facing of the chapel consists of smooth, superbly cut blocks of ashlar. The subtle alternation in the height of courses is reminiscent of the masonry in the church of T'oros I at Anavarza. As early as the fifth century Armenian architects varied the height of courses for aesthetic effect.<sup>77</sup>

There are single doorways in the north and south walls (figs. 62 and 64) and there was probably one in the west. The portal in the north wall is surmounted on the exterior by a depressed arch of six voussoirs with joggled joints. On the interior the depressed arch is elevated and two pivot housings have been placed at the sides directly above the jambs (fig. 65). Holes drilled into the underside of the housings undoubtedly have corresponding sockets in the door sill. This same arrangement, which once accommodated double wooden doors, is used in the south portal. Today its western jamb is missing. The exterior of this south portal is the most decorative element in the chapel (figs. 64 and 66). Here a horseshoe-shaped arch and oversized impost blocks are cut on the intrados with contiguous tori. Only the keystone of this arch has two projecting tori while each of the voussoirs has three. The two impost blocks have almost a serrated appearance because the tori are thinner and almost flat at the end; the intervening spaces are long semicircular notches. A now missing lintel had two corresponding tori at each end and was fitted into the impost blocks, like a piece in a jigsaw puzzle. Behind the horseshoe arch is a mutilated tympanum; its original relief decoration, if any, cannot be determined. The underside of the tympanum consists of a slightly depressed arch which is carried onto the interior. Today it is impossible to use

the north portal because the ground level outside has fallen considerably (fig. 62). This is not the case with the south portal where the slope is less steep (fig. 64).

At the east end the only opening in the wall is the narrow slit of the embrasured window (fig. 63). At the west the top of a roundheaded window is visible just below the apex of the nave vault (fig. 62).

In the interior of the chapel the masonry is of two types (figs. 65 and 67). All openings and salient projections are constructed with a fine smooth ashlar. The apsidal and nave walls as well as the vaults are built with small fairly crude stones which were once covered with stucco and paint. It was common in Armenian ecclesiastical architecture to use poor quality masonry on the interior when it was to be concealed under stucco. Today the interior walls are covered with black pitch from a not too recent fire—hence the name Kara Kilise (“The Black Church”). Apart from the entrance doors and west window, a niche in the north wall is the only other feature in the nave (fig. 65). This niche, located near the salient corner of the apse, has a monolithic lintel. Of the two niches in the apsidal wall the north one is roundheaded while the south niche has a flat top (fig. 67). The sill of the central embrasured window is not slanted inward. An attractive cornice molding consisting of a torus and a cavetto separates the semidome from the apsidal wall.

#### *Sarı Çiçek—37°29'/35°20'*

Sarı Çiçek (“Yellow Flower” in Turkish) is the most inaccessible site that I have surveyed in Anatolia. The only way to reach this complex from the west is by hiking 12 km. northeast of the small village of Etekli.<sup>78</sup> A person in good physical condition can make this trek across the mountainous valleys in about five to seven hours. Since there is neither a road nor a marked trail, a knowledgeable guide must be hired in Etekli. Sarı Çiçek is nestled on a small outcrop of limestone in a high valley of the Taurus range. The only evidence of human settlements within 5 km. of this site is a single homesteader who is farming the land directly north of the outcrop.

<sup>78</sup>Etekli can be reached by driving north from Adana via Çatalan for approximately 79 km. The village of Sivisli, and consequently the forts of Tamrut and Isa, are linked to Etekli by hiking trails. The tiny hamlet of Posyagbasan is a few kilometers closer to Sarı Çiçek than Etekli, but the road to Posyagbasan is not always passable even with a jeep. Also, it was reported that Sarı Çiçek could be reached by hiking west from a small village south of Meydan Kalesi.

<sup>77</sup>See note 43.

Judging from the size, plan, and quality of construction it appears that Sarı Çiçek is a monastery or a summer palace.<sup>79</sup> Its chapel is located in the south corner of the northeast apartments on the second level (figs. 68–69). Below the chapel is a reception room which is entered from the south. The chapel has suffered less damage than the rest of the complex, but most of its north wall as well as the entire vault over the nave and much of the apsidal semidome are missing (fig. 2).

The masonry of the chapel and the entire palace is of the highest quality. At the east and south the exterior facing consists of huge rusticated blocks with neatly drafted margins (figs. 68, 70, and 71). On the average these blocks measure 62 cm. in height and 78 cm. in length. The exterior of the west wall has blocks of equal size, but their faces are smooth because this wall is actually in the interior of the apartments (figs. 68–69). Also, some of the stones on the exterior of the west wall are "keyed" around larger blocks. This type of adaptation does not occur on the interior of the chapel. In the east corner of the collapsed north wall a large section of the poured core is clearly visible around the north apsidal niche (figs. 69 and 72). Typically, the core consists of field stones bound in a heavy mixture of mortar. I saw no evidence of potsherds or brick in the core. Like the stones on the exterior of the west wall, the interior masonry consists of large, smooth, perfectly cut ashlar blocks (figs. 73–74). Only a narrow band of mortar is visible in the interstices. Both on the exterior and interior facings there is a subtle alternation in the height of courses.

On the exterior of the chapel some peculiar features should be noted. The apsidal window is crowned by a monolithic lintel with a smooth face (fig. 70). The shape of this block is reminiscent of the one in the apsidal window at Frenk Kilise (fig. 3). At the base of the east wall (i.e., the east wall of the first-level reception room) the lower two courses of stone seem to fan out, becoming noticeably wider at the north (figs. 2 and 71). This sort of talus may have been necessary since the east side, unlike the south side, has no visible foundation of rock. Ob-

<sup>79</sup> A description of the entire complex is in my forthcoming monograph on the castles of Armenian Cilicia. Although the names and histories of many of the medieval monasteries of Armenian Cilicia are known, it is impossible at this time to associate securely Sarı Çiçek or Kız (near Göşne) with any of them. A systematic survey of all of the Taurus valleys will have to be undertaken before such an assessment can have any credibility. See H. Oskean, *Kilikioy Vank'ıra* (Vienna, 1957), 3 ff; and H. Tēr Lazarean, *Haykakan Kilikia* (Beirut, 1966), map and 25 ff.

viously, a wider base could more easily support the weight of the chapel. The single entrance door in the west wall of the nave is topped by a monolithic lintel (figs. 68–69) which is surmounted at each end by the springing stones of a now collapsed relieving arch. Wedged between the springing stones is a semicircular monolithic disk, which once filled the tympanum of the arch. This relieving arch probably was surmounted by an embrasured window. The rounded top of that collapsed window lies just southwest of the door (fig. 68).

On the interior of the west door a ledge has been carved in the soffit of the lintel (fig. 74). Two holes in this ledge, behind the jambs, indicate that swinging doors were accommodated. Above the lintel and directly behind the tympanum block is a very thin, depressed relieving arch. This arch is segmented into three uniform elements. Of particular interest are the two deep rectangular niches in the south wall (figs. 2, 69, 72, and 74). These nearly identical squareheaded recesses are unprecedented in Armenian Cilicia. Their presence is not required for the Armenian liturgy. To assume that these compartments were the royal boxes, where the king and queen might observe the sacrifice of the mass, is highly speculative. It is certain that the north wall of the nave had a door. The springing stones of its arched top are still visible in the wall (figs. 69, 72, and 73). A faceted cornice separates the apsidal wall from the semidome. The sill of the embrasured window is slanted downward into the apse at a fairly steep pitch. The apsidal niches are roundheaded. In each niche the diameter of its rounded top is less than the width of its base. This difference creates small indentations which make the outlines of the niches resemble the plan of a chapel (fig. 69).

Tamrut—37°28'/35°09'

Tamrut Kalesi is the southern neighbor of İşa and can be reached by hiking south-southwest from Sivili for 4 km. On one published map Tamrut is referred to as "Alışekale."<sup>80</sup> The walls of Tamrut Kalesi crown the edges of a lofty precipice of limestone. The builder and date of construction of this fortress are unknown. This rather large complex has a single chapel which is built in a natural cleft

<sup>80</sup> Deutsche Heereskarte, Blatt-Nr. H-9 (Ulukişla), 1:200,000, 1941. Tamrut is the name given to this area by the local residents. Since Tamrut and Meydan hold the distinction of being the largest castles in the vale of Karsanti, it is likely that one of them is the medieval Barjberd (Partzperpert). See Smbat, *La Chronique* (*supra*, note 52), 77.

of rock on the midpoint of the ascending east circuit (fig. 75: the chapel is located in the center). Because of this adaptation the apse is oriented to the southeast.

This chapel is in an excellent state of preservation (fig. 2). The single door at the west and most of the exterior facing stones on the west wall are missing. The chapel is surmounted by a platform which is constructed with a type of masonry that is significantly more crude than that of the chapel and appears to be a later construction.

The masonry in the chapel is of the highest quality. The exterior of the east wall and the north corner of the west wall are built with large perfectly trimmed rusticated stones. This masonry is identical to the facing on the room south of the chapel (fig. 75). On the interior the entire apse, the west wall, and the upper sections of the south and north walls of the nave are built with a finely executed smooth ashlar (figs. 77–78). On the average the length and height of each block are 41 and 33 cm. respectively. Because the chapel was built into the native rock the lower two-thirds of the south wall and the bottom half of the north wall of the nave consist of smooth almost vertical scarps of natural limestone (figs. 79–80). Since the color and texture of the ashlar in the chapel and the surrounding buildings are identical to the scarped faces we can assume that Tamrut, like other mountain fortresses, was built of masonry quarried only inside the enceinte. The only crude form of masonry in the chapel is found in the slightly pointed vault over the nave (figs. 76–78).<sup>81</sup> Here small rough slabs of stone are laid radially and are bound in a heavy mixture of mortar and rock chips. Unlike the rest of the chapel, there is some evidence that these stones were once covered with stucco.

Directly in front of the west door is a rectangular opening to a subterranean cistern. The opening is actually a break in the vault of the cistern. It appears that the volume of this chamber is almost as great as that of the chapel and that all of the east wall of the cistern is underneath the chapel. Just how much of the chapel floor is supported by the subterranean vault and east wall of the cistern is unknown. The only remnant of the west door of the chapel is a monolithic sill of dark (imported?) limestone (fig. 80). The sill is wedged between two

extensions of the scarped rock; on its inner side a ledge has been carved to accommodate a single (?) swinging door. Directly above the west door is an embrasured window (fig. 78). The other interesting feature in the nave is a large hole at the east end of the north wall (fig. 79). It was here that the smooth ashlar was adapted to the natural rock to form a niche. The top of this roundheaded niche is still visible.

Preceding the salient corners of the apsidal wall are the fragments of a single-stepped bema (figs. 77 and 79). Unfortunately, the evidence for bemas is slight in Armenian Cilicia, the floors of churches and chapels having often been destroyed by treasure hunters.<sup>82</sup> The apsidal wall has two round-headed niches flanking the central window (figs. 77, 79, and 80). This embrasured window has a tiered sill slanting downward into the apse. A simple tapered cornice separates the apsidal wall from the semidome (cf. Meydan and İsa). The semidome is constructed with an oblong center (fig. 76).

*İsa—37°29'35°07'*

The fortress of İsa is located in the southwest corner of the largest highland valley in Cilicia. Two of the immediate neighbors of İsa are Tamrut and Sarı Çiçek. Near the southeast end of this valley is Meydan Kalesi. İsa Kalesi, which can be reached by hiking west-southwest from the village of Sivışlı for approximately 4 km.,<sup>83</sup> is perched on a pinnacle of limestone. It is the smallest fortification with a chapel that I have surveyed in Armenian Cilicia (fig. 81). The chapel is located in the rounded northeast corner of the fort. The curious orientation of the apse toward the north rather than the east was necessitated neither by the topography nor by any regional traditions (cf. Tamrut and Sarı Çiçek, fig. 2). It is possible that the architect erred in positioning this structure. The chapel is in excellent condition, except for the east half of the apsidal wall which has collapsed.

Typically, the chapel consists of a simple apse and nave. The latter has a single jambless door at the southwest. Like the rest of the castle, the exterior walls of the chapel are constructed with a large well-cut rusticated masonry. These stones are aligned neatly in their courses and their narrow interstices are filled carefully with mortar and occasional rock

<sup>81</sup> All of the preserved vaults over the naves of Armenian chapels are essentially barrel vaults which have slightly pointed apices. I have drawn in barrel vaults on my plans only when it is difficult to render this subtle change in shape accurately and when the form of a collapsed vault is unknown.

<sup>82</sup> The only other evidence for bemas is in the parapet chapel at Anavarza (south bailey) and in the central apse of the church of St. Gregory the Illuminator at Sis.

<sup>83</sup> Sivışlı appears on the Deutsche Heereskarte, Blatt-Nr. H-9 (Ulukışla), 1:200,000, 1941.

chips. On the interior of the chapel the ashlar is relatively smooth and measures on the average 37 cm. in length and 29 cm. in height (figs. 82–84). There may be traces of stucco on the slightly pointed vault over the nave.<sup>84</sup> Unfortunately, the frequent campfires of nomads and smugglers have so blackened the interior of the chapel that it is difficult to assess the masonry.

The nave presents a few peculiar features. Its diminished size in comparison to the apse is simply a result of limited space. The elongated horseshoe-shaped apses appear to be a common feature in Armenian Cilicia regardless of the size of the nave.<sup>85</sup> It should be noted that even in the large garrison forts the chapels tend to have a standard size which is not significantly larger than the chapel in İsa Kalesi. There is a sculptured cross on the north pier of the west door (fig. 85). This cross is incised in a circle and has four triangular arms of equal length. This decoration, which is on the fourth course of stone from ground level, is carved on a relatively smooth block of ashlar. Above and below this block the stones have a rusticated center with neatly drafted margins. The rusticated masonry does not appear on the interior of the chapel. The west door is surmounted by a relatively flat monolithic lintel.

The transition between the vault over the nave and the semidome is accomplished by a transverse arch.<sup>86</sup> Despite the partial collapse of the apsidal wall, the semidome is largely preserved. Soot and the deposits from the oozing core cover the apsidal dome so heavily that it is difficult to determine how it is constructed. Its ashlar blocks may radiate around an oblong center. Part of the apsidal window and all of the west apsidal niche are present today (fig. 83). One side of the corresponding niche

<sup>84</sup> It is also possible that the seepage of mortar from above has left a coating of lime wash on blocks which were not stuccoed.

<sup>85</sup> Compare Cuneo, *Basilicae (supra*, note 44), 98–99.

<sup>86</sup> In my plans of the Armenian chapels I depict the transverse arch, which separates the apse from the nave, as a single line because this arch is only visible as a protruding element at the junction with the higher nave vault. The intrados of this transverse arch normally is flush with the exterior faces of the adjoining stones in the semidome. Sometimes the stones of the transverse arch are so carefully integrated into the semidome that they become indistinguishable from the masonry of the semidome (e.g., Tamrut, fig. 77). In a few chapels the masonry of the semidome is distinct from the terminal arch (e.g., Meydan, fig. 34 in First Report). When both sides of the transverse arch clearly project from the element which is being supported (e.g., the doubleux in the naves of chapels U and X at the land castle of Korykos, fig. 39 in First Report), then the arch is represented as two parallel lines.

survived the collapse of the apsidal wall (fig. 84). There is no separate molding course to divide the semidome from the apsidal wall, but the course of stones directly below the springing of the semidome is thicker at the top than at the bottom. This creates a subtle, tapered cornice.<sup>87</sup> The most curious feature in the apsidal wall is a shallow hollow directly above the now shattered east niche (fig. 84). This indentation is deepest at the north where its top is cut with a sharp right angle and its bottom is curved. Inside of the hollow two very abstract squares are carved in relief. A second smaller square is carved in the center of each of these units. This hollow is not the result of vandalism or sculptural doodles; its significance is unknown.

#### Kız (near Gösne)— $37^{\circ}02' / 34^{\circ}37'$

When returning to Kız in 1981 I was fortunate to find the same guide who directed me to the site two years earlier.<sup>88</sup> Proceeding northeast from Gösne (via Korum) we abandoned our jeep 3 km. before Kayacı<sup>89</sup> and hiked northwest on an unmarked trail for one hour. Just west of the cloister at Kız a local herdsman pointed out a well-marked trail which leads north to Çandır Kalesi.

The cloister at Kız occupies a crescent-shaped shelf on the side of a lofty cliff (fig. 86). When approaching the cloister from above or below the easiest line of access is from the west.<sup>90</sup> The modern visitor must *carefully* traverse the sloping face of the rock cliff. In medieval times some sort of removable ladder probably aided entrance into the area. When entering from the west it becomes apparent that much of the thin circuit wall at the edge of the cliff has collapsed. This wall guards the north wing of the shelf against the remote possibility of attack from below. Gate A cuts across the width of the north wing about 45 m. east of the west end of the cloister (fig. 86). The gate and its adjoining wall are constructed of a smooth ashlar varying greatly in size (fig. 87). The smaller stones are confined to the upper half of the wall; this may represent a

<sup>87</sup> Compare the cornice in the apsidal wall of Meydan's chapel (fig. 34 in First Report).

<sup>88</sup> First Report, pp. 172–73.

<sup>89</sup> The road from Gösne to Kayacı is marked on the Map of the War and Navy Departments (United Kingdom), Sheet H-9 (Mersin, 1:200,000, 1943).

<sup>90</sup> To approach the cloister from above at the east involves some risk, yet it is the most direct line of access (fig. 88). Descent can be made with strong ropes. An ascent to the shelf from the canyons at the north or the east is most dangerous since the limestone cliffs are too weathered to hold crampons firmly.

repair, or more likely it reflects the tendency of builders to place the smaller stones in areas where they bear less weight. Although gate A is damaged it does appear to be a jambless door. The gate's collapsed lintel is surmounted by a depressed relieving arch which creates a very thin tympanum (fig. 87; cf. fig. 74). On the interior side of the gate wall at the north there is a joist hole and a horizontal chase. The former probably anchored some sort of wooden support on the interior of building B. The latter undoubtedly functioned like similar elements in the chapel at Kiz, the apartments at Çandır, and the lower terrace at Sis.<sup>91</sup> Below the chase and the joist hole there is a half-buried square-headed niche. The stone foundation of the north and south walls of building B is barely visible. It is clear from the placement of these walls and the chapel that the inhabitants did not fear an attack from above. The overhanging cliff, which shades much of the shelf, makes a ballistic assault from the top impractical (figs. 87–88).<sup>92</sup> The north circuit wall ends at the northeast spur, where the chapel stands. The masonry of the circuit, like gate A, is finely cut ashlar. A second examination showed that the small salient-buttress just northwest of the chapel's north portal actually joins the north circuit.<sup>93</sup>

Judging from the surviving foundation it appears that the masonry of the atrium is smaller and slightly inferior to the ashlar in the chapel. Whether this represents a different building period cannot be determined since the junction of the north wall of the atrium with the chapel is partially buried. New measurements confirmed the earlier findings about the size and position of the atrium's west door (fig. 87: the west wall of the atrium is at the bottom right), but the south door of the atrium may actually be wider than I had earlier suspected (fig. 89).

On the interior of the chapel I reexamined the relief in the north wall of the nave (figs. 89–90). It now seems certain that this fragment of interlacing tori is actually the top of a squareheaded niche at the east end of this wall.

The entire east wing of the shelf required no circuit wall because of the vertical nature of the cliffs below and the fact that it was not vulnerable, like the north shelf, to attack from neighboring cliffs. At the southern end of this east flank the side of

the shelf has been neatly scarped and four troughs have been cut in the floor (figs. 86 and 91). The presence of post-holes near the troughs indicates that wooden buildings were adapted to the narrowing end of the shelf. There is no evidence of cisterns in the cloister; water was probably drawn from the stream below the north shelf.

#### CONCLUSIONS

As few Armenian churches are preserved even to their foundations it is difficult to generalize about any trends or norms in the large ecclesiastical buildings. It seems likely that two major types of churches made their appearance during the period of the Armenian kingdom. One is a hall-type church, the other a centrally planned domed church. The former is typified by St. Sophia (i.e., St. Gregory the Illuminator) at Sis and the church of T'oros I at Anavarza. In both cases a single hall is divided into a nave and flanking aisles; these parallel units are each covered by a longitudinal barrel vault, and they are aligned to the central apse and flanking apsidioles respectively. In the second type of church, which we see at Frenk and Çandır, the apsidioles are closed off by walls and doors and are not aligned to the center of any potential aisles; there is no sense of a longitudinal axis. In these two structures it seems likely that a cupola was positioned over the center of the church. In the post-medieval period we have a hybrid type in the monastic church of St. James at Saimbeyli. Here there are open apsidioles aligned to the aisles as well as a central cupola over the nave.

In contrast to the churches, the great number of preserved chapels provides evidence of a design that is uniform and simple. The masonry and walls have sufficient strength to support the vault, without transverse arches in the body of the nave or relieving arches in the thickness of the walls. Such buttresses were common in the chapels of Armenia Major during the archaic period and later in constructions around Lake Van. In many cases the flat and often unarticulated walls in Cilician chapels reflect the utilitarian tastes of military architecture.

The reader should remember that while all the buildings discussed in this paper and in the First Report are protected by fortified walls some are not "military" in nature. The churches and chapels at Frenk, Saimbeyli, Sis (lower terrace), and Kiz (near Gösne) are merely parts of cloisters which principally served the religious needs of a resident

<sup>91</sup> See p. 135.

<sup>92</sup> In fig. 86 the overhang has been cut away to expose the shelf.

<sup>93</sup> Lohmann, *Kloster*, 14. See note 79 *supra*.

civilian population and secondarily the needs of a neighboring garrison. Since the majority of fortresses in Armenian Cilicia show no evidence of churches or chapels within their enceintes today, one must assume either that the garrison worshiped outside the fort in a nearby town, or that chapels of timber were frequent, or that the crumbled remains of many stone chapels are hidden in the thick shrubbery which covers most of

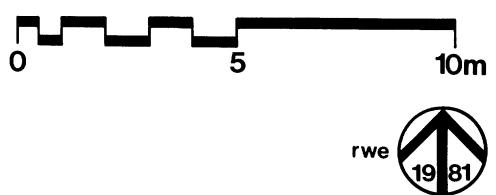
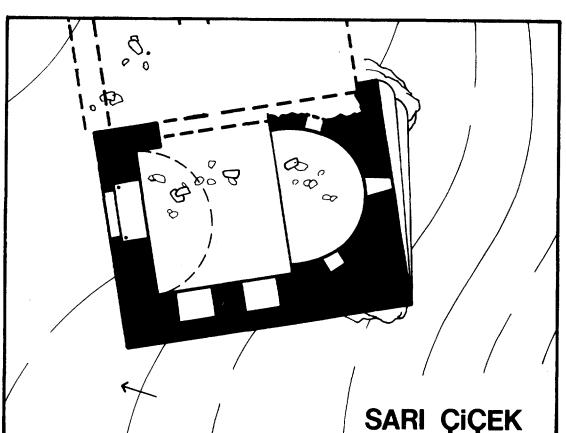
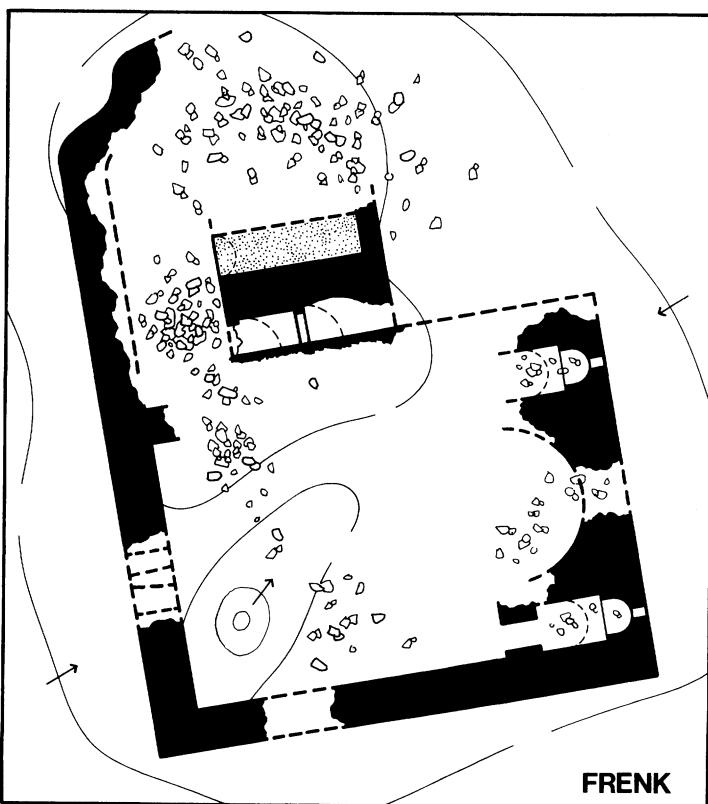
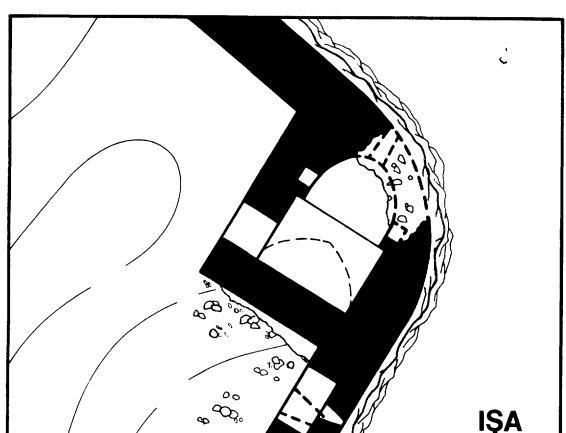
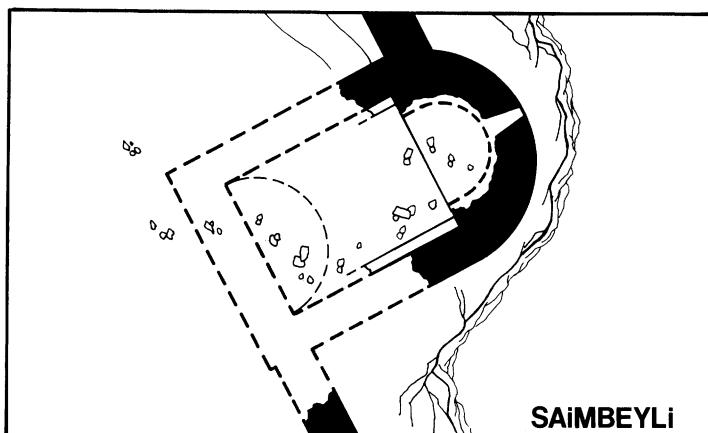
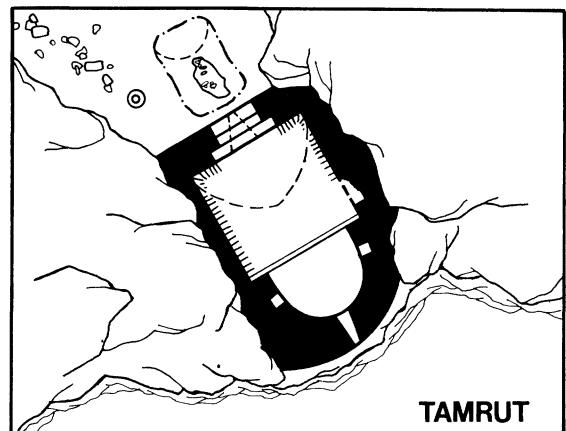
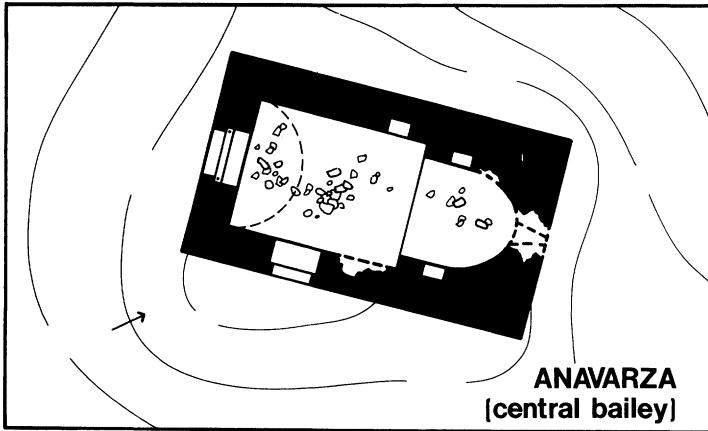
the castles. Undoubtedly, excavations will increase greatly our knowledge of this kingdom.

The Group in Ancient History and  
Mediterranean Archaeology,  
University of California,  
Berkeley

June 1982



1. Frenk, Church, Exterior, looking West at the Southeast Corner



2. Turkey, Cilicia, Armenian Churches and Chapels



3. Frenk, Church, Interior, looking Southwest into Southwest Corner of Nave

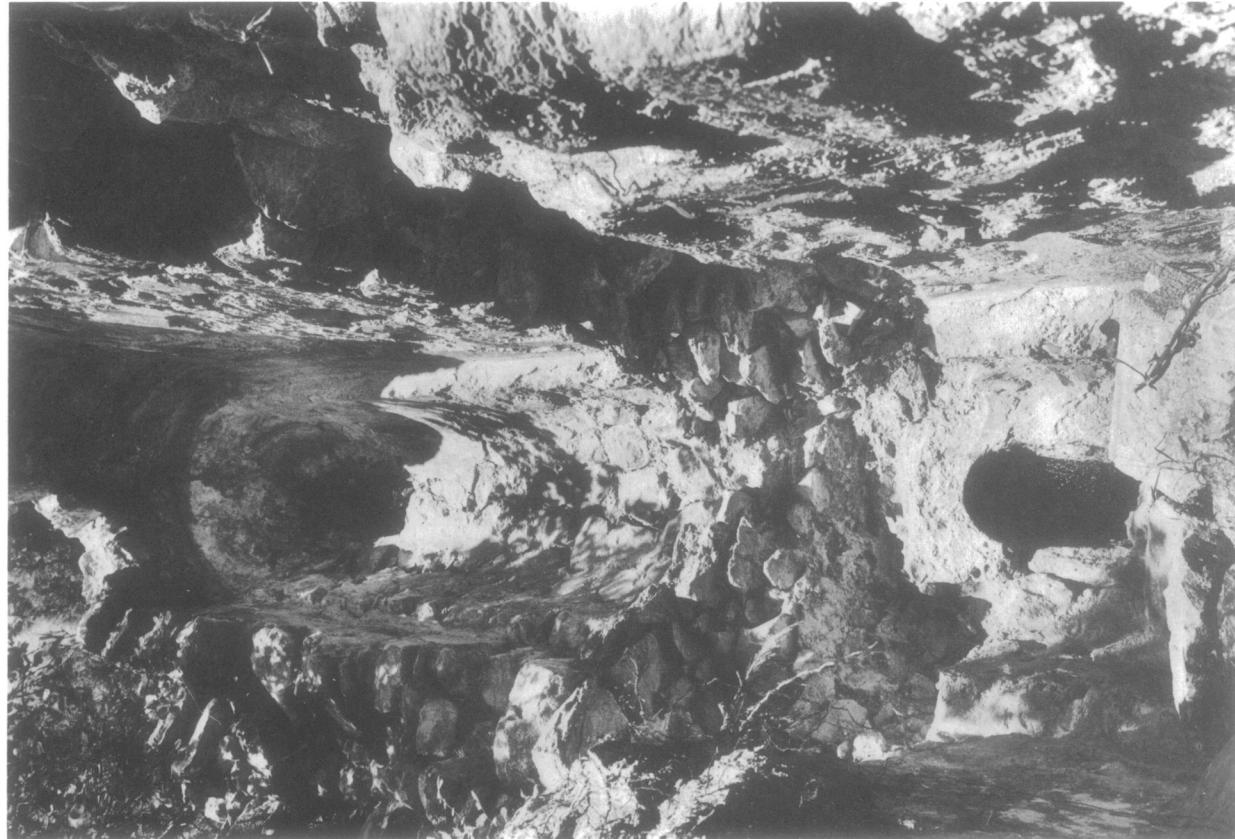


4. Exterior, looking Northwest at Apsidal Window in Lower-level South Apsidiole



5. Interior, looking East into the Two Southern Apsidioles

Frenk, Church



7. Interior, looking East from Lower-level South Apsidiole



6. Exterior, looking West at Apsidal Window in Upper-level South Apsidiole

Frenk, Church



8. Looking Southwest from Apse of Lower-level South Apsidole



9. Looking Northeast at the Two Chambers attached to North Wall of Nave

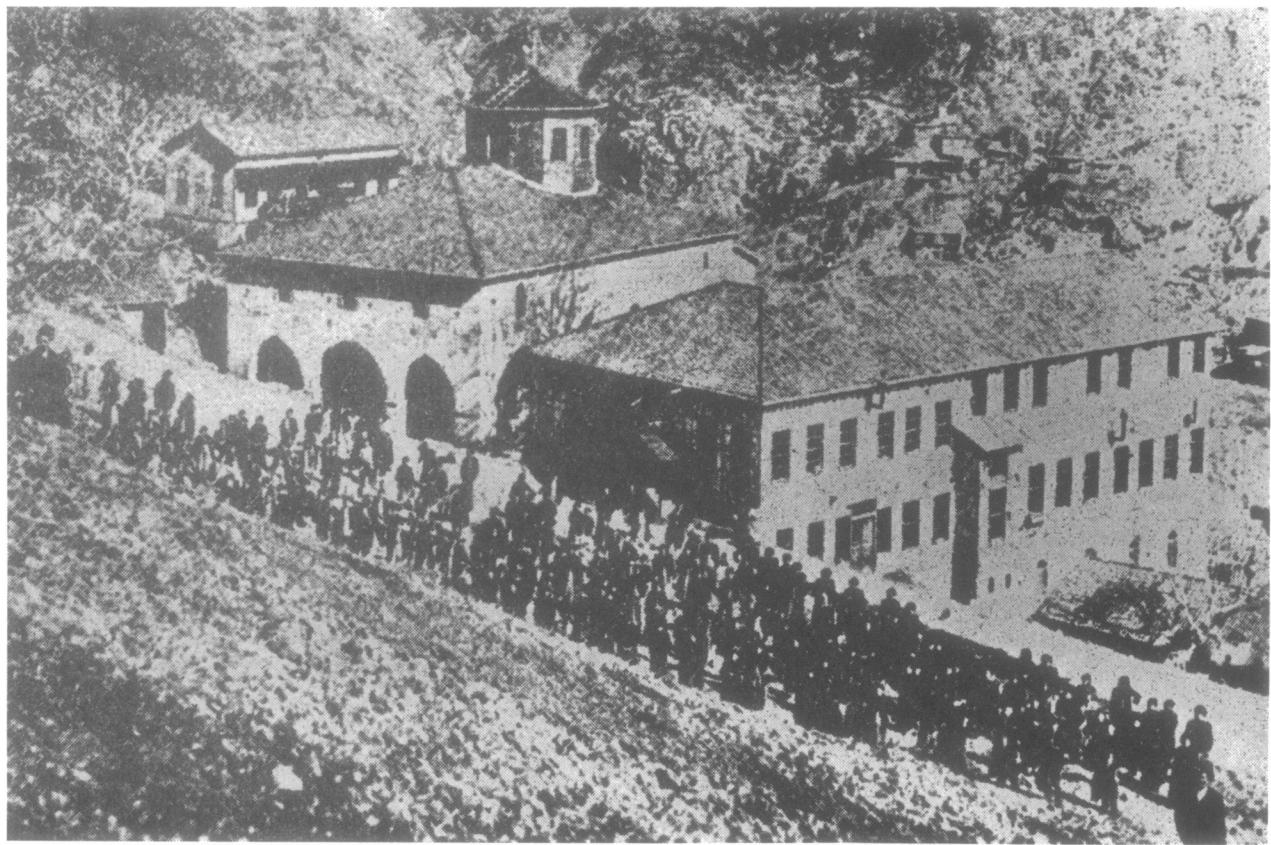
Frenk, Church, Interior



10. Saimbeyli, Church of St. James, Exterior, looking Southeast; Arrow Shows Location of Fort



11. Looking North at Circuit Wall (foreground) and South Apsidiole (background, right)



12. Looking Northeast at Church and Orphanage before 1919

Saimbeyli, Church of St. James, Exterior



14. Looking Northeast into North Apsidole



13. Looking Southeast into Central Apse

Saimbeyli, Church of St. James, Interior



15. Looking Northwest at Nave

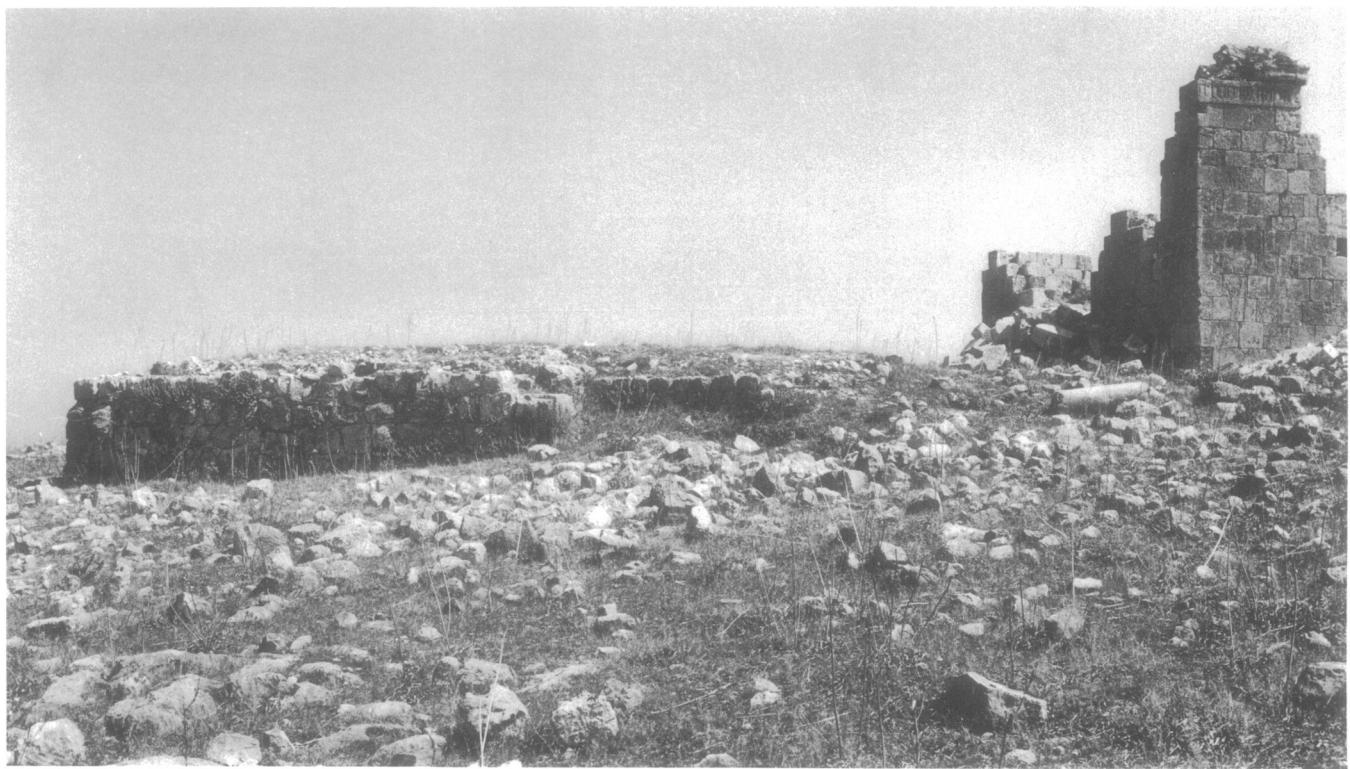


16. Looking Northeast at Semidome of North Apsidiole

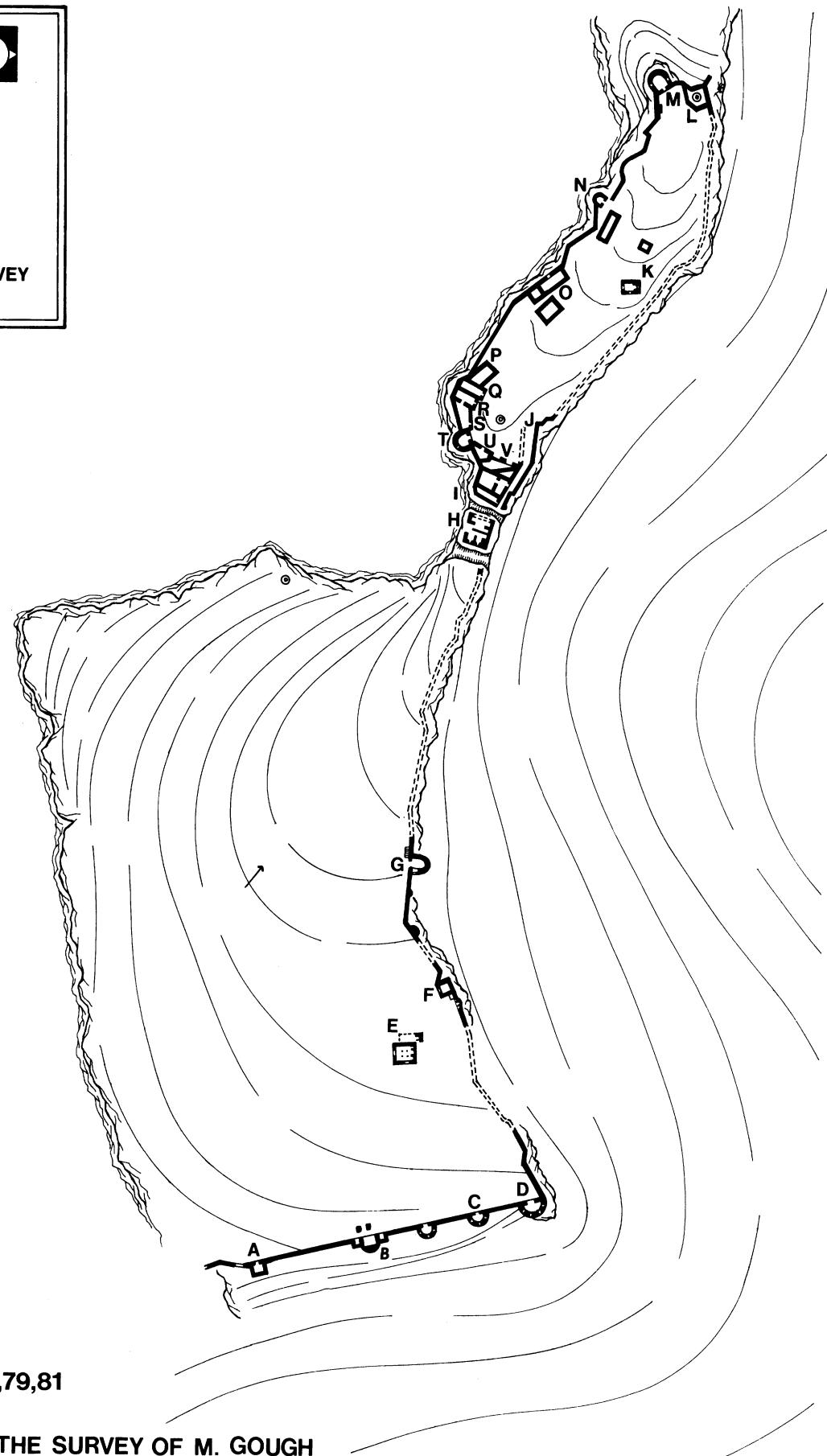
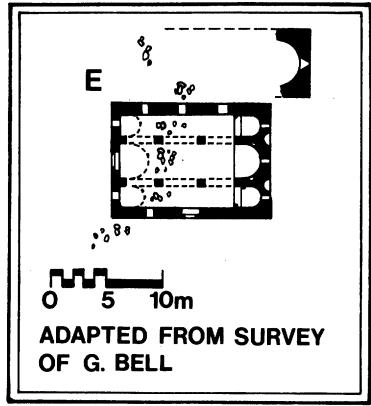
Saimbeyli, Church of St. James, Interior



17. Saimbeyli, Church of St. James, Exterior, looking Southwest at Northeast Corner of Chevet



18. Anavarza (South Bailey), Church of T'oros I, Exterior, looking North at Church (right) and *Gavit* (?)





20. Looking North at Chevet of Church (left) and Oratory



21. Looking West at Chevet of Church (left) and Oratory

Anavarza (South Bailey), Church of T'oros I, Exterior



22. Looking South at Oratory (left) and North Wall of Church

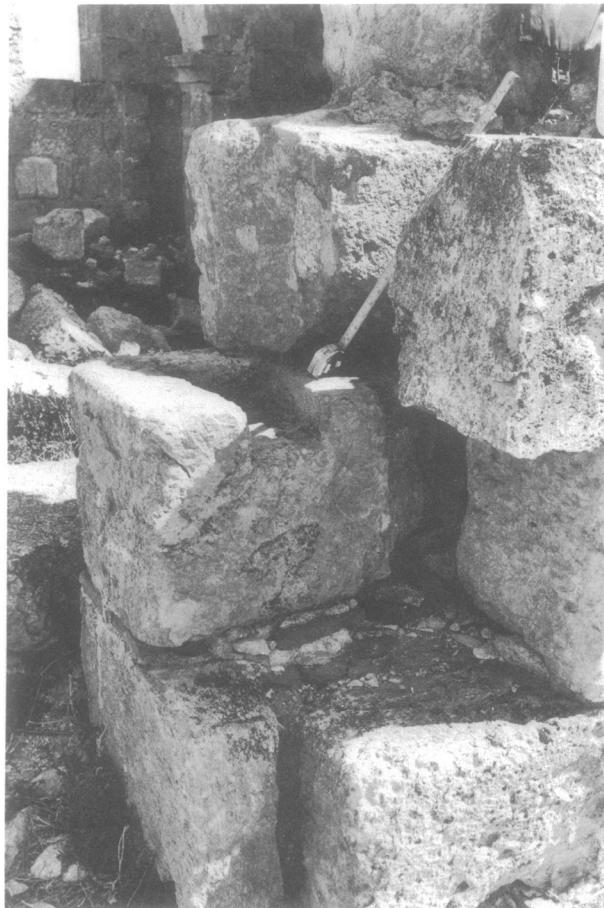


23. Looking South at North Wall of Church

Anavarza (South Bailey), Church of T'oros I, Exterior



24. Fallen Lintel near West End of Nave



25. Looking Northeast at East Jamb of South Door

Anavarza (South Bailey), Church of T'oros I, Exterior



26. Church of T'oros I, Interior, looking into Southwest  
Corner of Nave



27. Byzantine Gate, looking East

Anavarza (South Bailey)

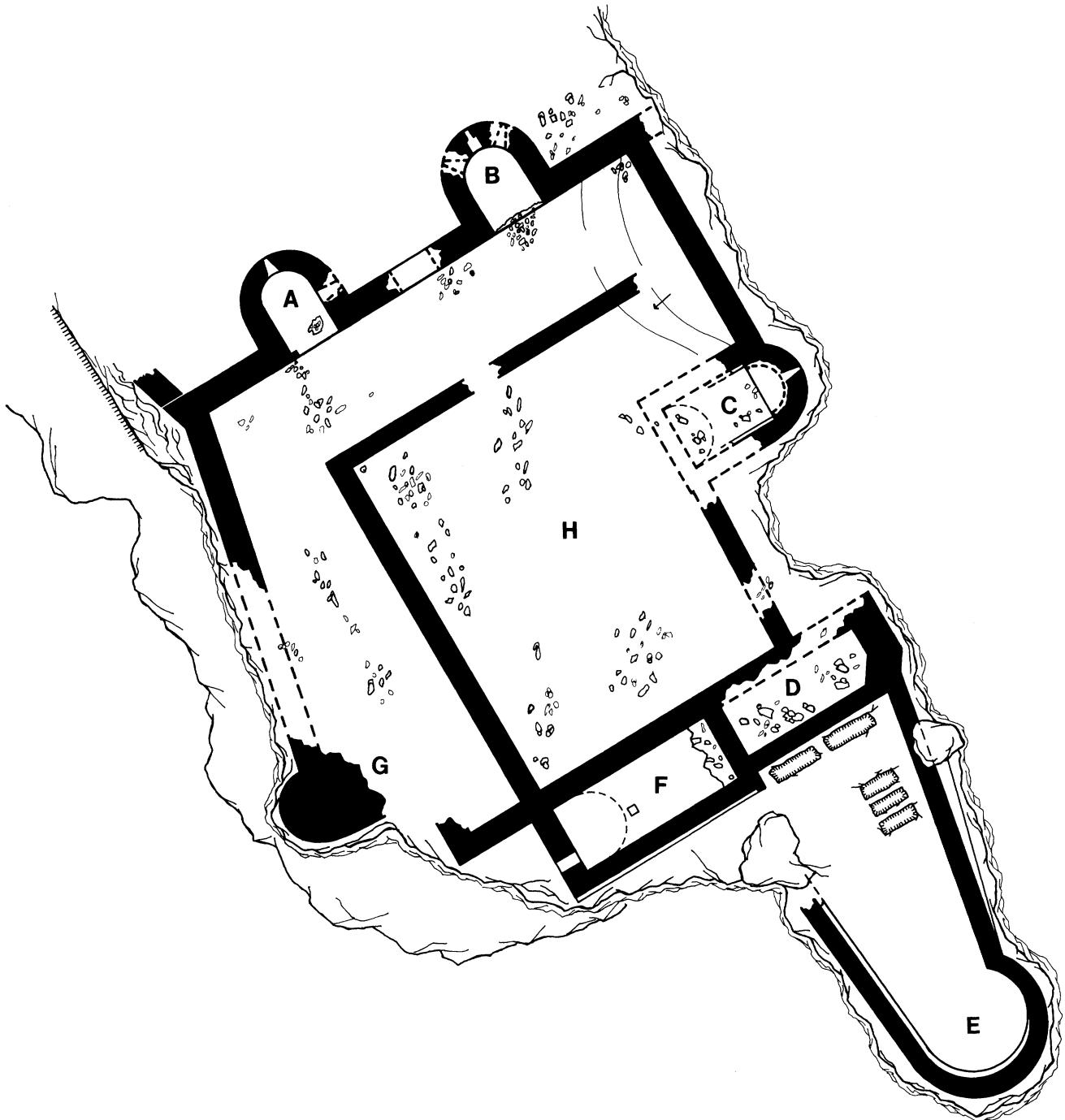


28. Central Apse, Semidome



29. Looking Northeast at Cornice Molding of Central Apse

Anavarza (South Bailey), Church of T'oros I, Interior



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31. Exterior, looking South at Chapel C (far left), and Towers A and B

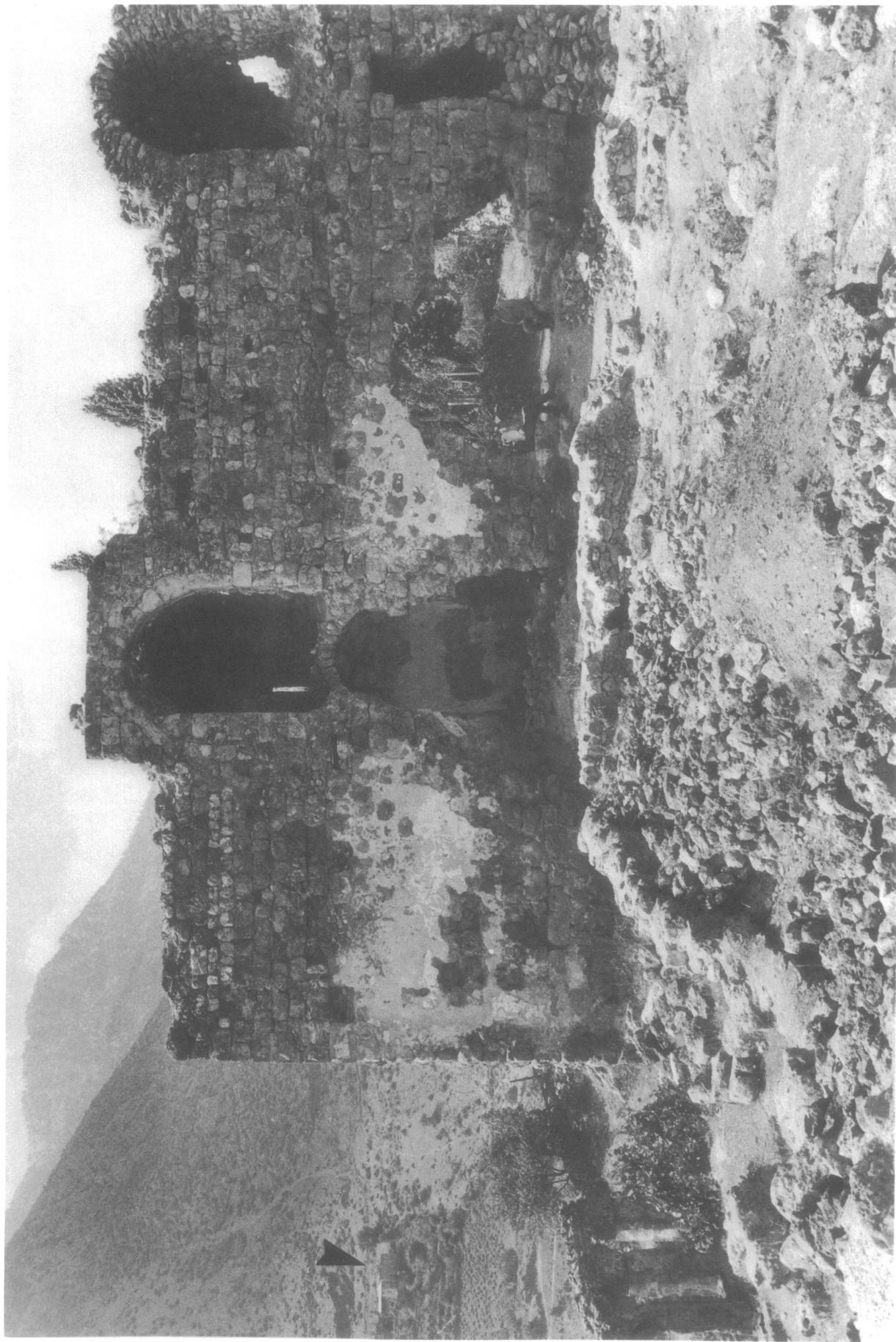


32. Interior, looking North at Chapel C (right)

Saimbeyli, Fortress



33. Saimbeyli, Fortress, Interior, looking East into Chapel C



34. Saimbeyli, Fortress, Interior, looking Northwest at Towers A and B; Arrow Shows Location of Monastery



35. Parapet Chapel (right of center), looking North at Building F



36. Parapet Chapel, Interior, looking East

Anavarza (South Bailey)



37. South Bailey, Parapet Chapel, Interior,  
looking Northeast



38. Central Bailey, Chapel K, Exterior, looking Northeast



39. Looking Southwest



40. Looking East at Relieving Arch of West Door

Anavarza (Central Bailey), Chapel K, Exterior



41. Looking North at Lintel Fragment in South Door



42. Looking West at East Wall

Anavarza (Central Bailey), Chapel K, Exterior

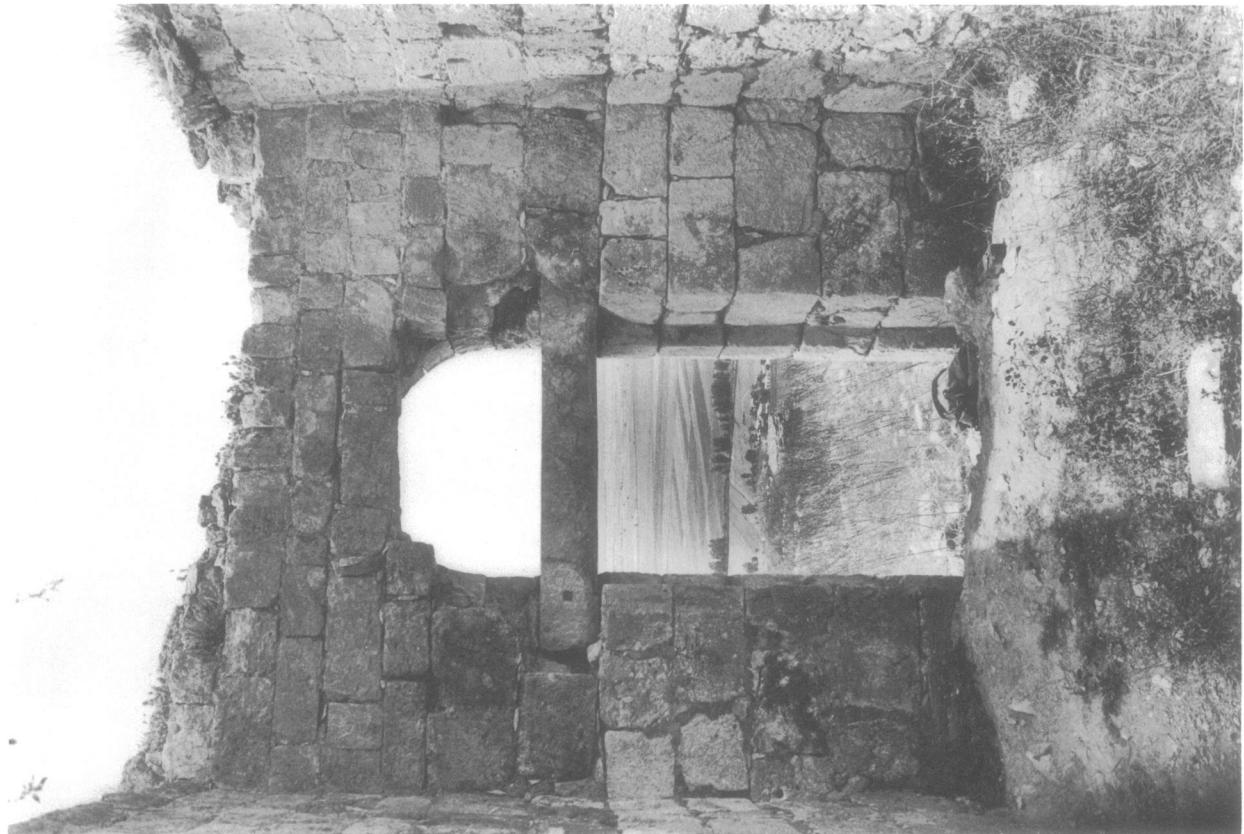


44. Looking East into Apse

43. South Door

Anavarza (Central Bailey), Chapel K, Interior





46. West Door



45. Looking North at Niche in North Wall of Nave

Anavarza (Central Bailey), Chapel K, Interior



47. Exterior, looking Northeast at East End



48. Interior, looking Northeast into Northeast Tower

Sis (Lower Terrace), Donjon A

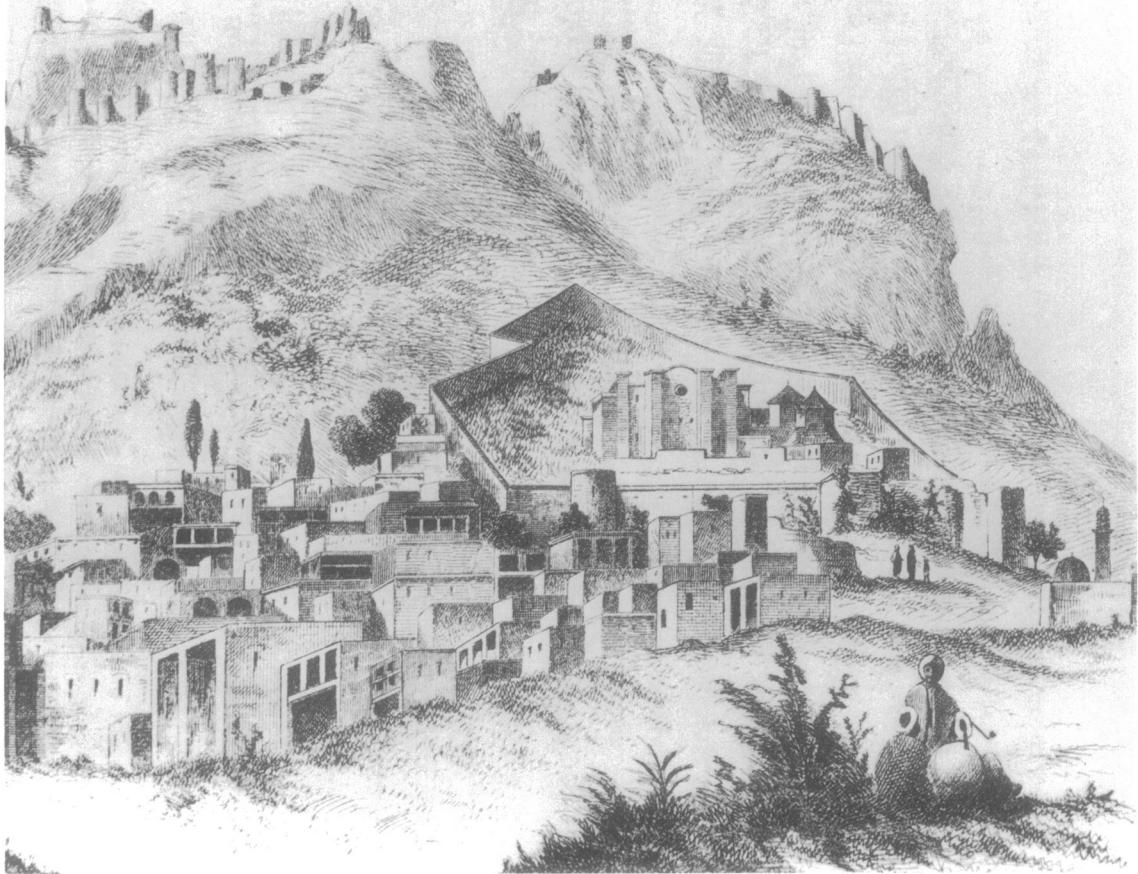


49. Tower C, looking Northwest

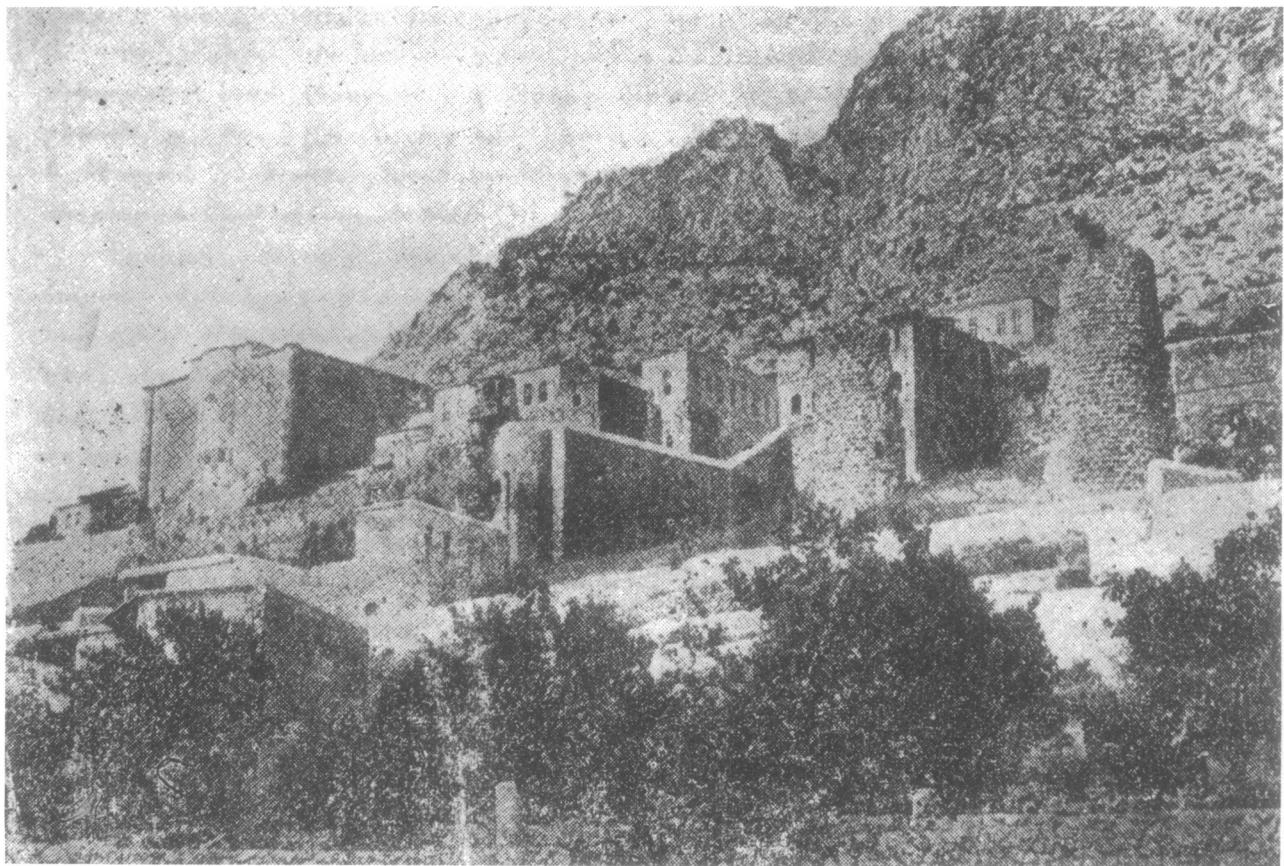


50. Tower D and Circuit of Patriarchs, Exterior, looking Northwest

Sis (Lower Terrace)



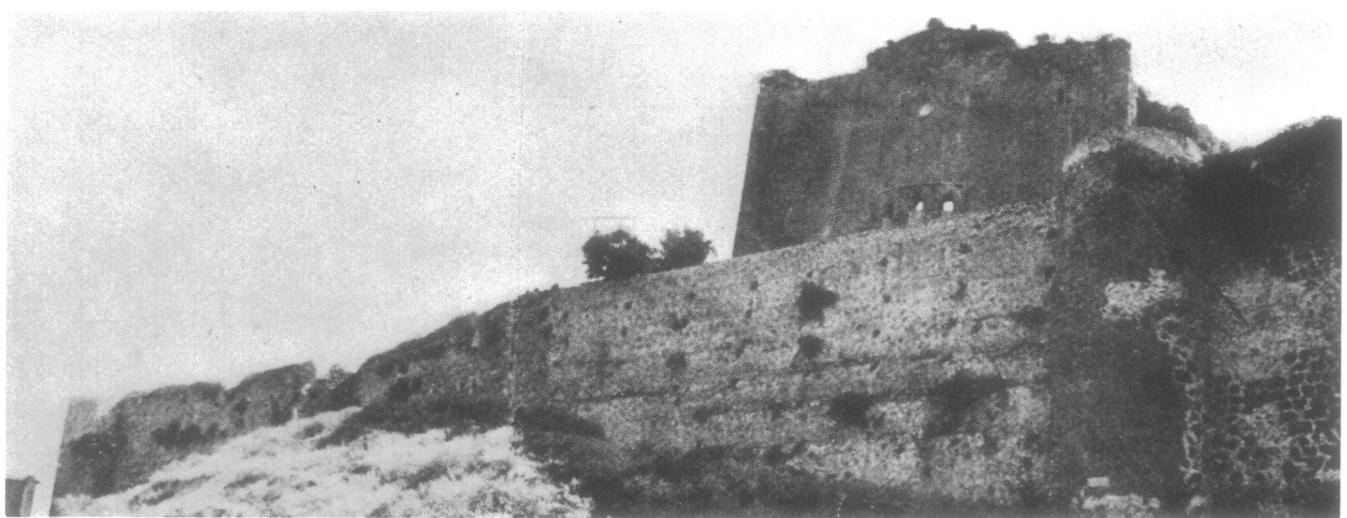
51. Sis. Mid-nineteenth Century View of City; Lower Terrace and Castle from Southeast



52. Sis (Lower Terrace) Pre-1919 View from Northeast

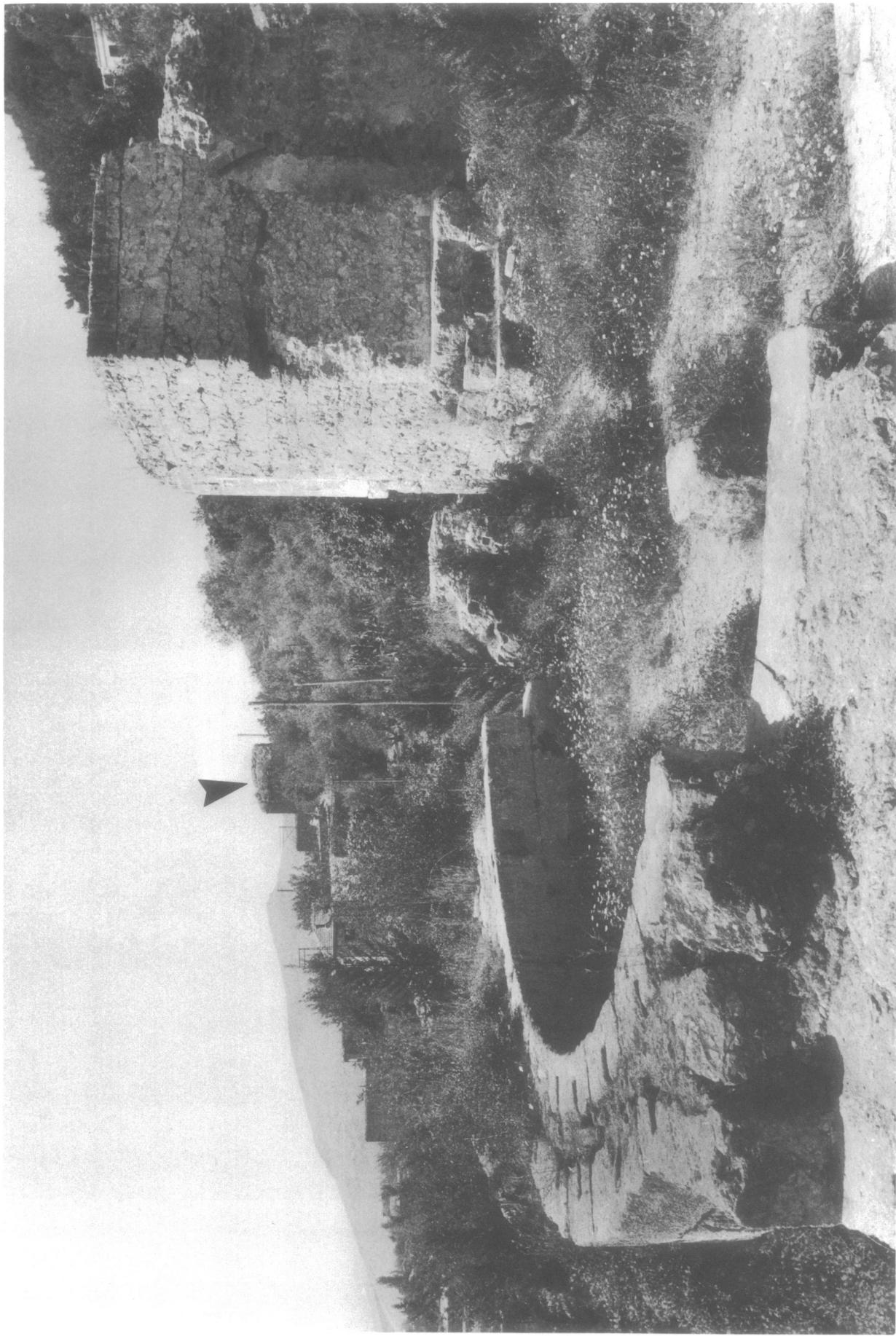


53. Chapel G, Bell Tower, Church of St. Gregory the Illuminator (background), and Circuit Wall (foreground, right and left) as viewed from South in 1943



54. Circuit Wall and Church of St. Gregory the Illuminator as viewed from Northeast in 1943

Sis (Lower Terrace)



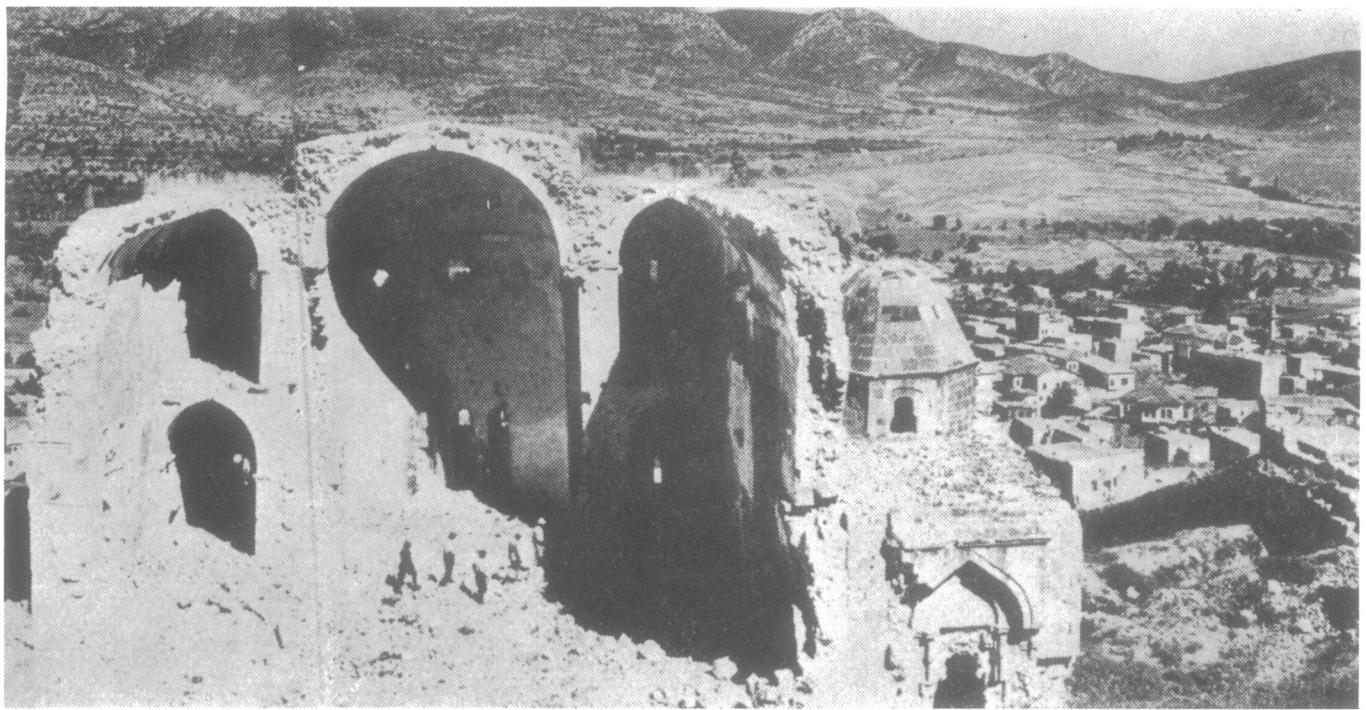
55. Sis (Lower Terrace), Apse F and Chapel G, looking South; Arrow Shows Location of Kara Kilise



56. Apsidole E, Exterior, looking Southeast



57. Apsidole E and Entrance to Crypt in Apse F,  
Interior, looking Northeast  
Sis (Lower Terrace)



58. Church of St. Gregory the Illuminator and Chapel G as viewed from West in 1943



59. Chapel G, Interior, Looking Northwest

Sis (Lower Terrace)



60. Looking South

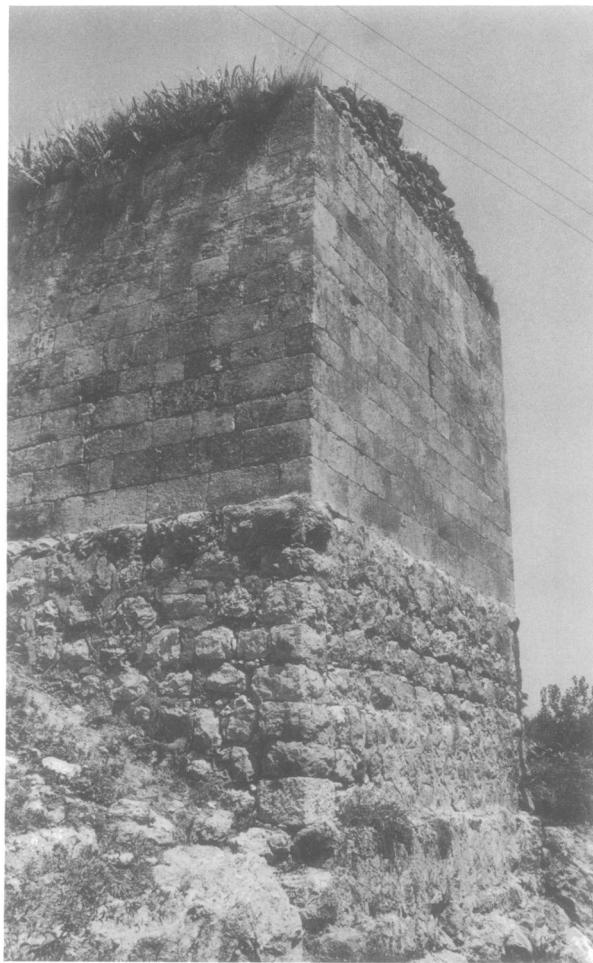


61. Looking Southwest

Sis (Lower Terrace), Chapel G, Exterior



62. Looking Southeast



63. Looking Northwest at East End

Sis (Lower Terrace), Kara Kilise, Exterior

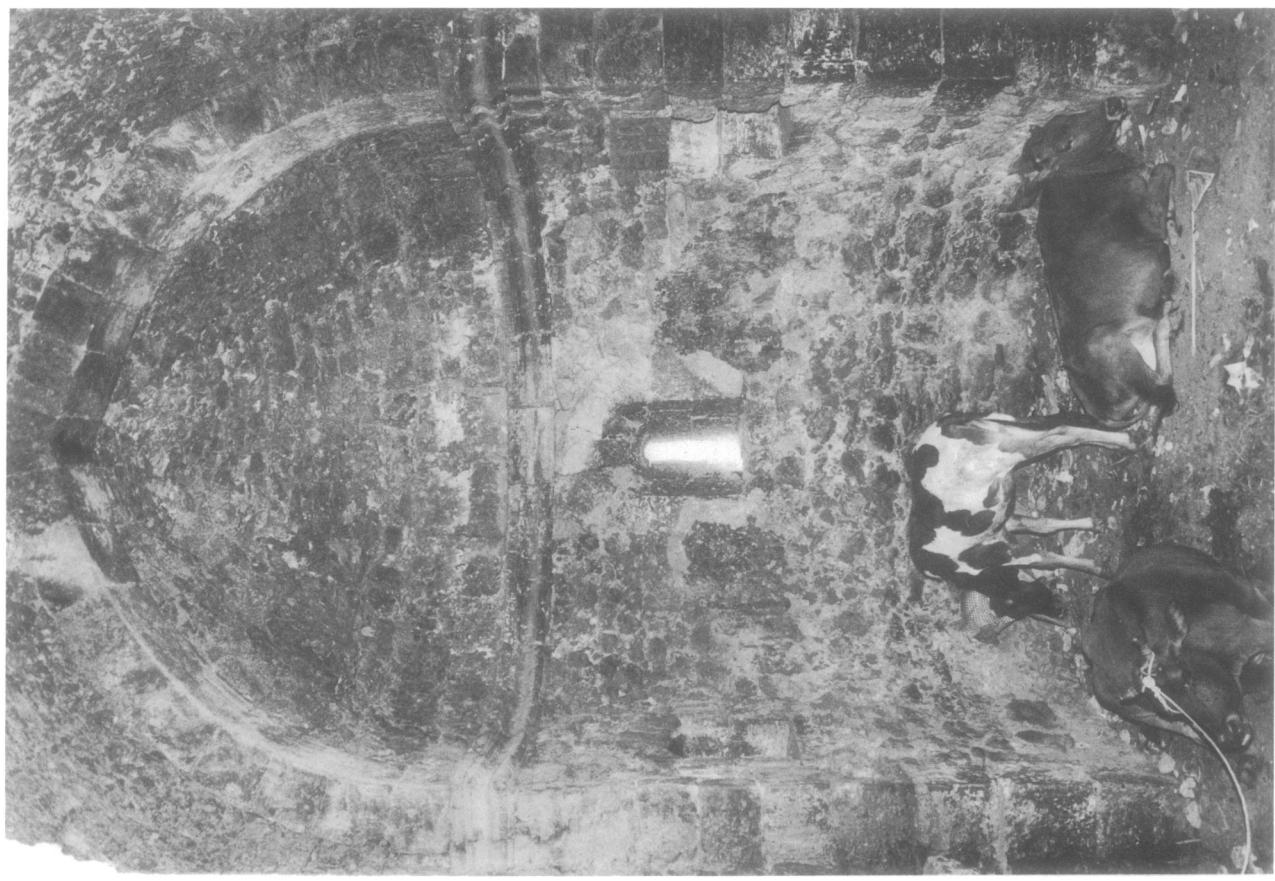


64. Exterior, looking Northeast

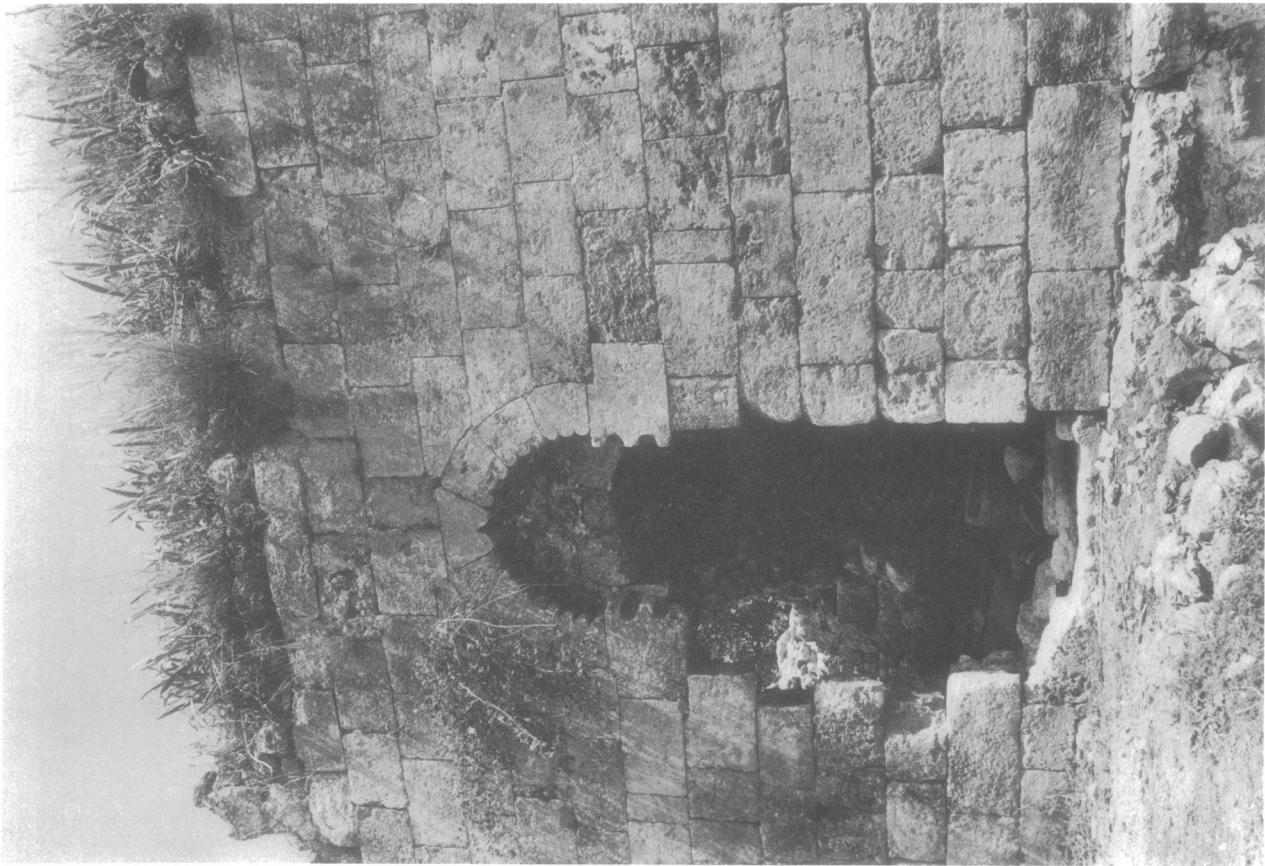


65. Interior, looking North into Nave

Sis (Lower Terrace), Kara Kilise

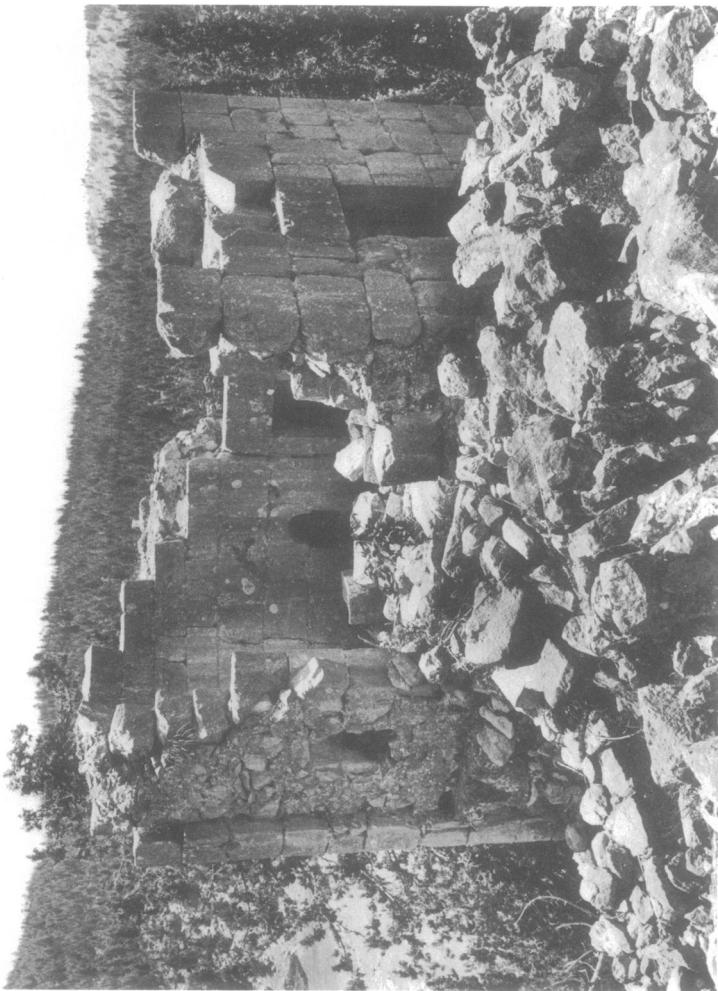


67. Interior, looking East into Apse

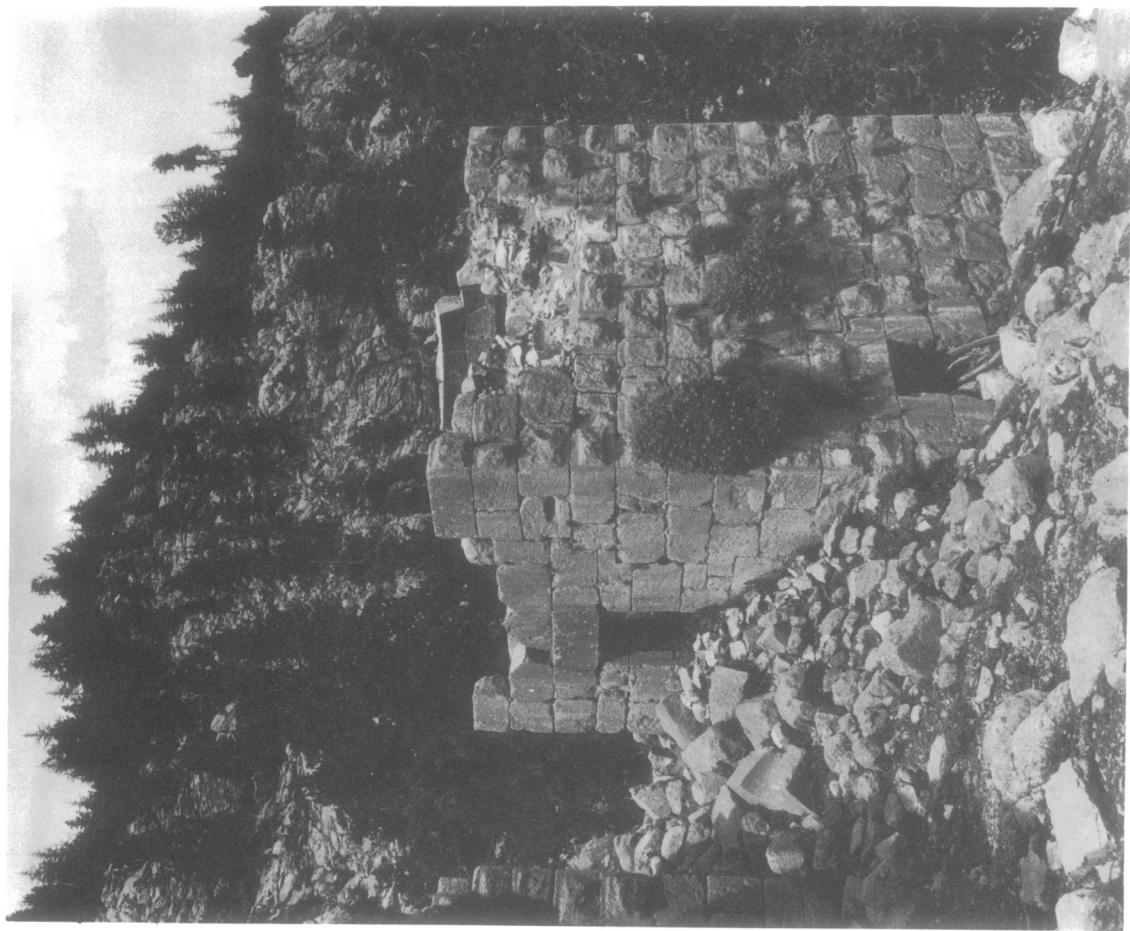


66. Exterior, looking Northwest at South Door of Nave

Sis (Lower Terrace), Kara Kilise



69. Looking Southeast

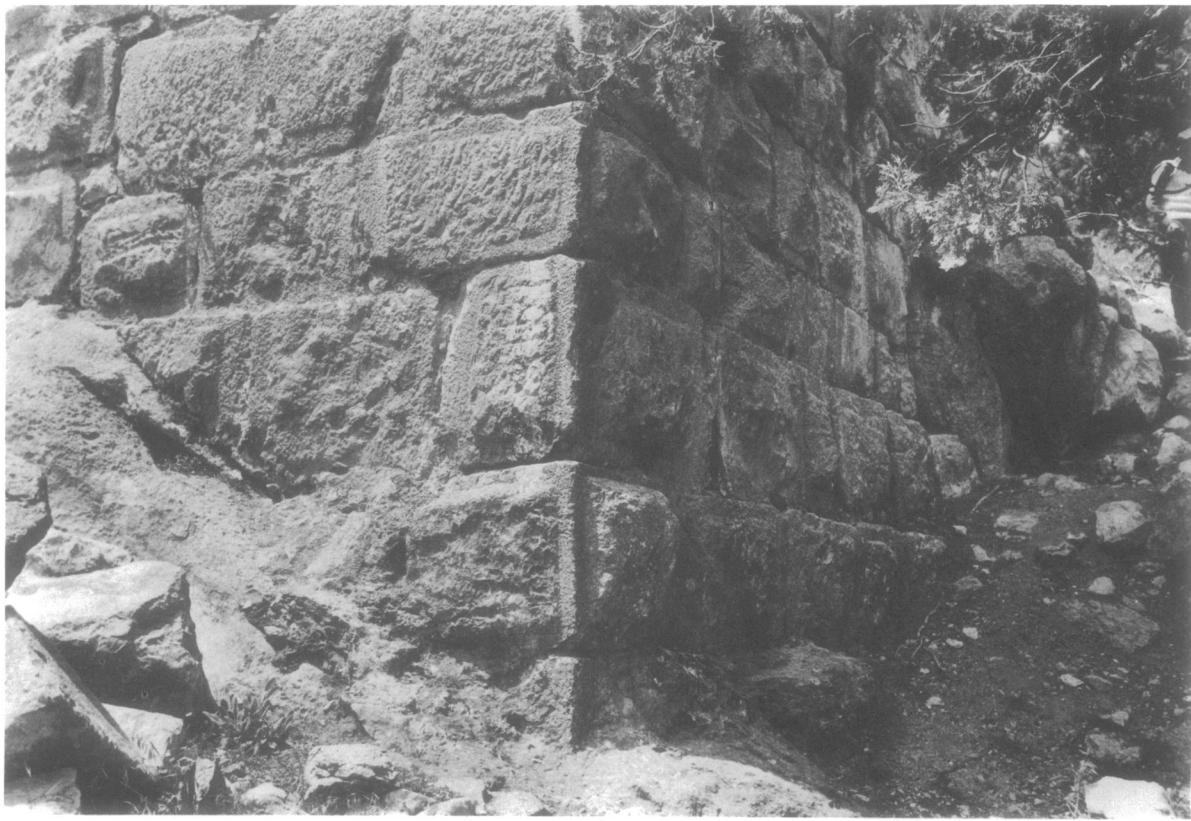


68. Looking Northeast

Sarı Çiçek, Chapel, Exterior

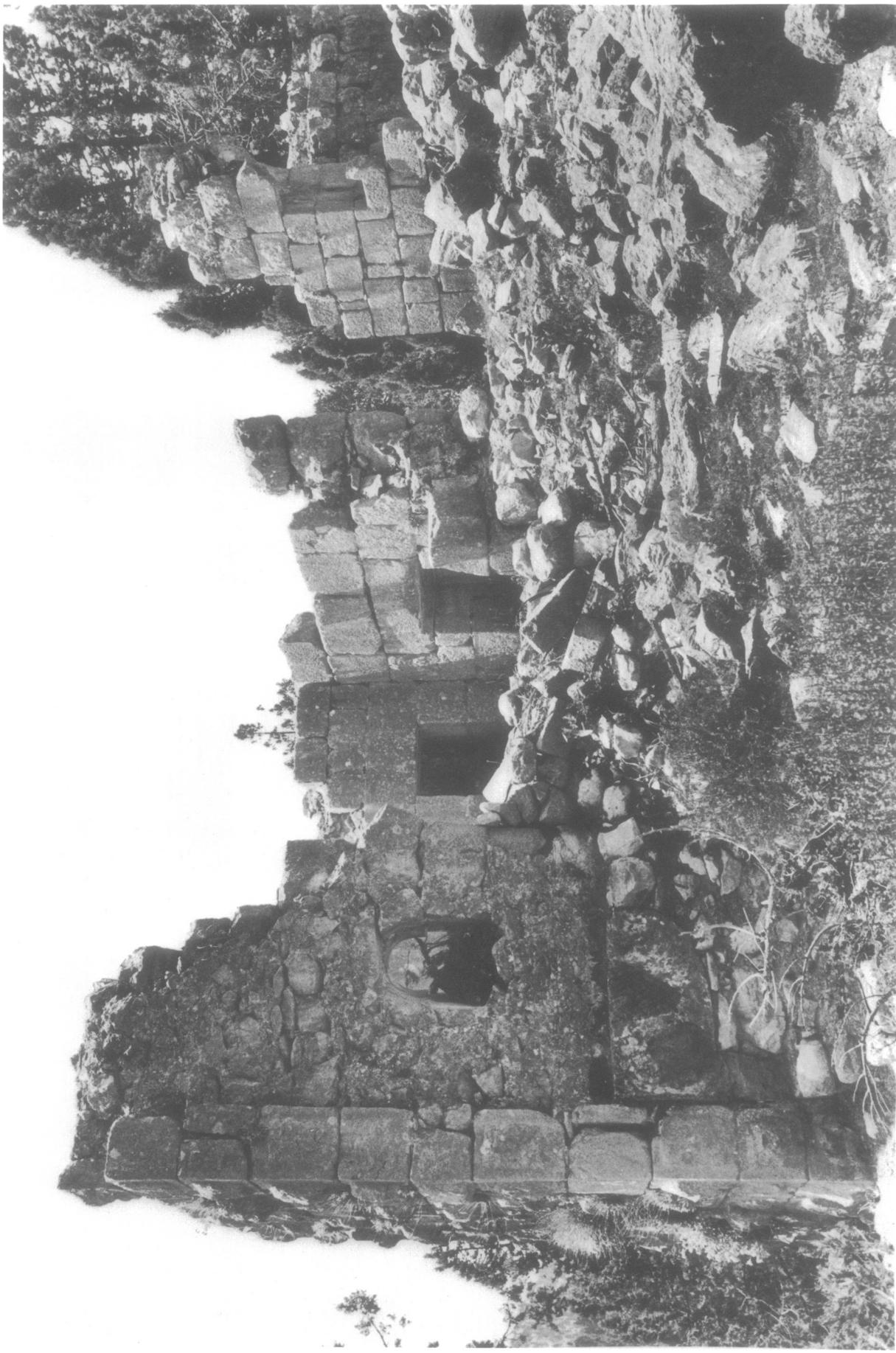


70. Chapel, Exterior, looking Southwest at Apse



71. Foundation of Room below Chapel, Exterior, looking Northwest at Southeast Corner

Sarı Çiçek



72. Sarı Çiçek, Chapel, looking Southwest through Collapsed North Wall



73. Looking East into Apse



74. West Door

Sarı Çiçek, Chapel, Interior



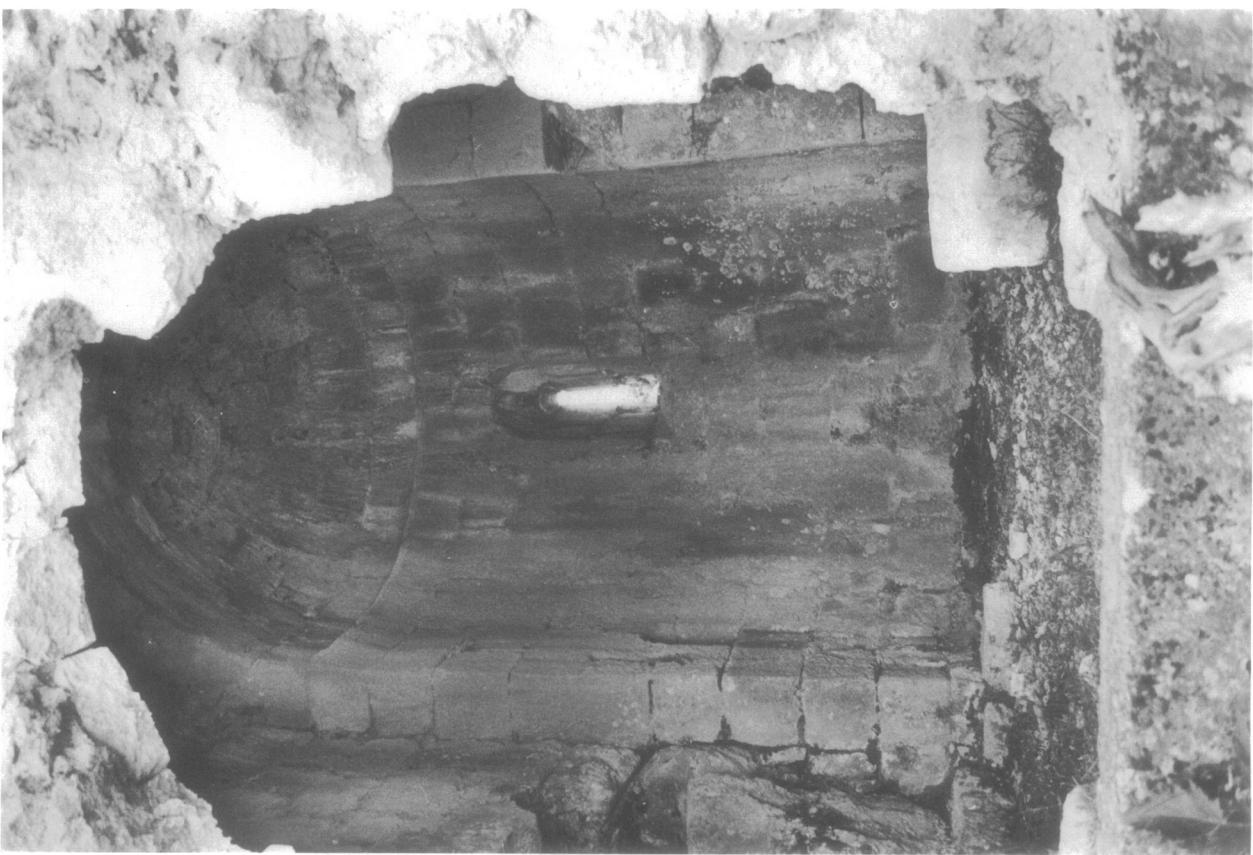
75. Tamrut, Chapel (center), Exterior, looking Southeast



76. Tamrut, Chapel, Interior, Apsidal Semidome



78. Interior, looking Northwest at West Wall of Nave



77. Looking Southeast into Apse

Tannut, Chapel

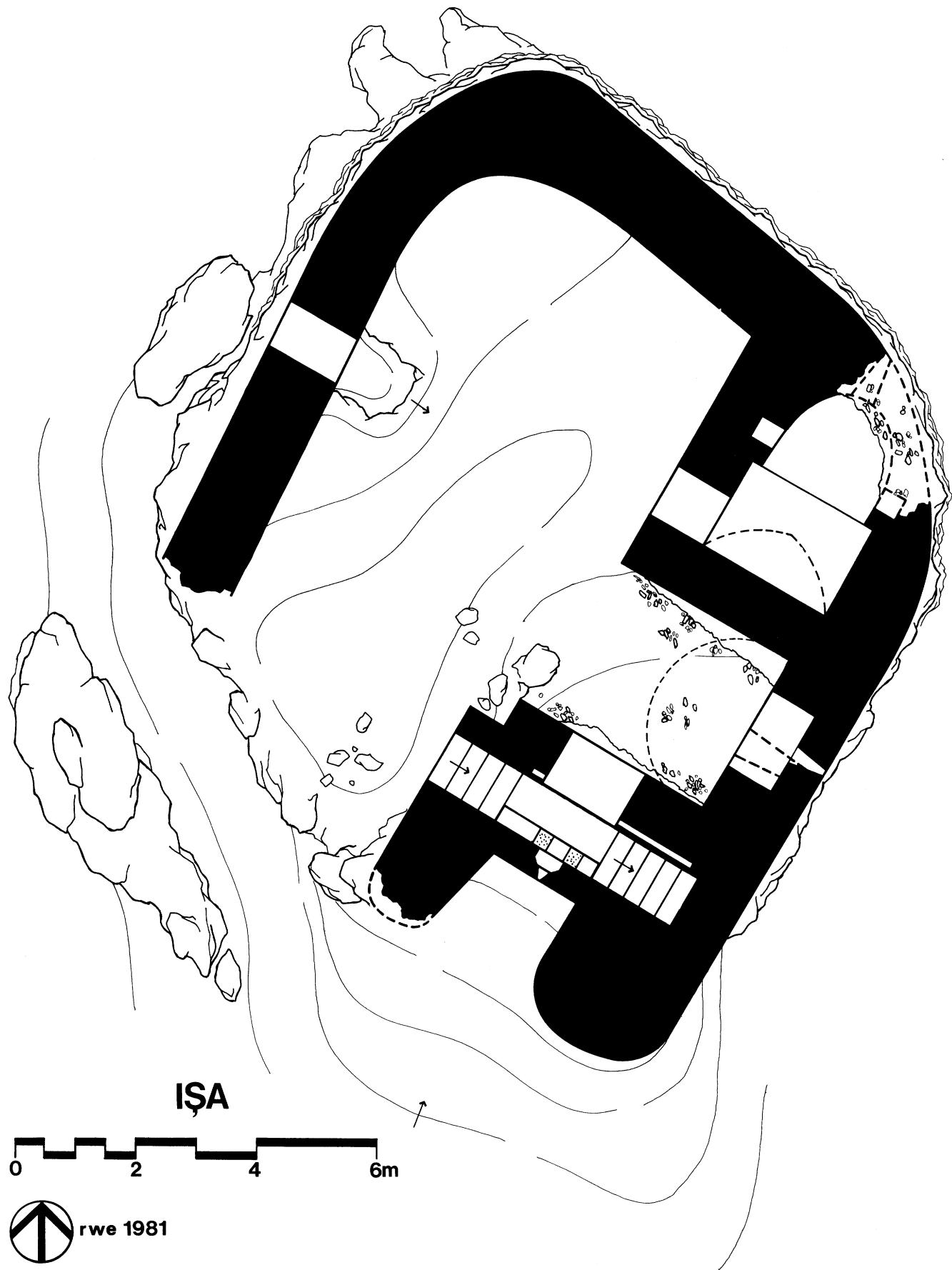


80. Looking South into Nave and Apse

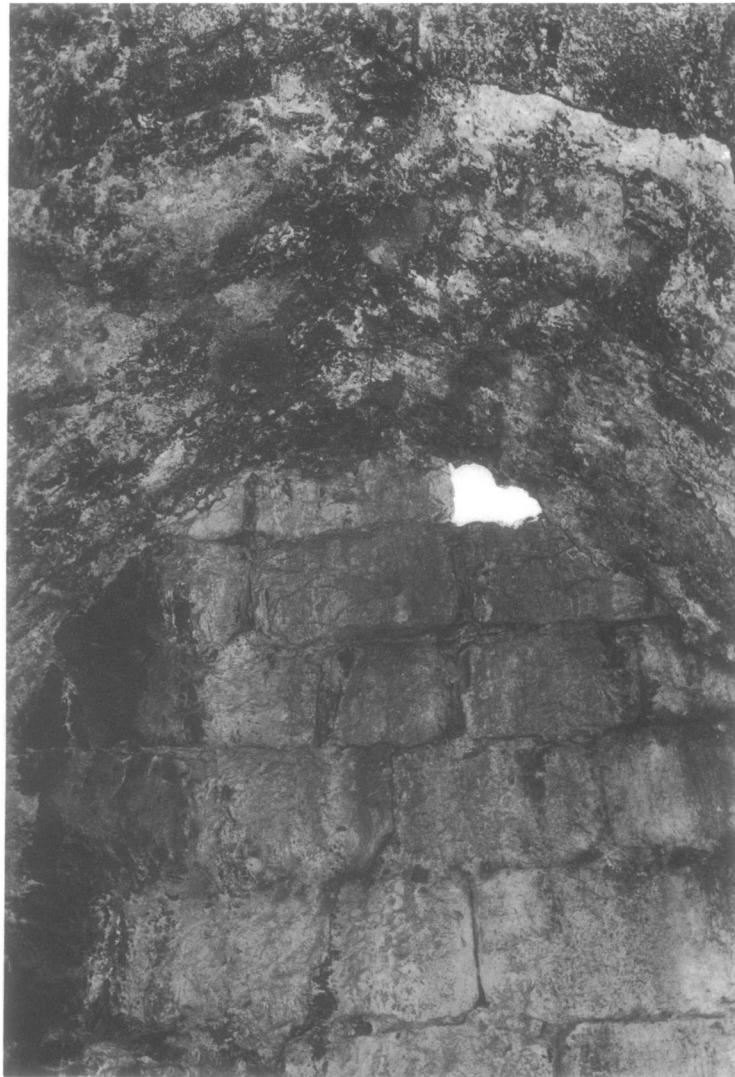


79. Looking East into Nave and Apse

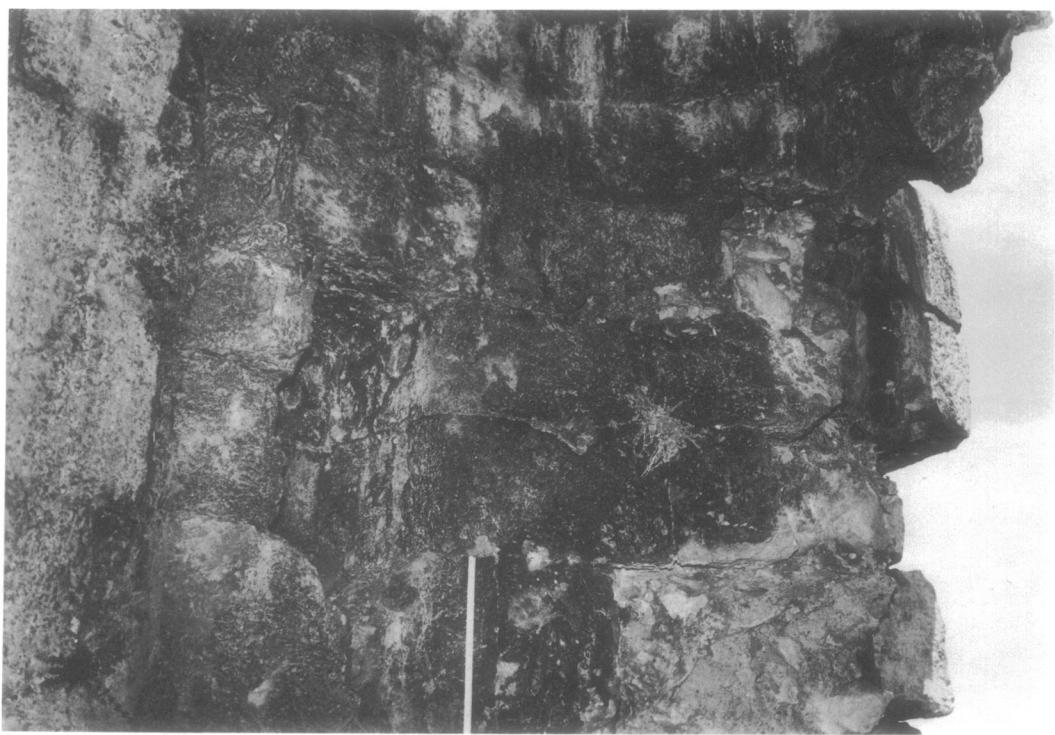
Tamrut, Chapel, Interior



81. Fortress



82. Looking South at Upper Half of West Wall of Nave



83. Looking North at Apsidal Wall

Iṣa, Chapel, Interior



85. Looking Northeast at Relief on Door of Nave



84. Looking Southeast at Collapsed Apsidal Wall

İsa, Chapel, Interior

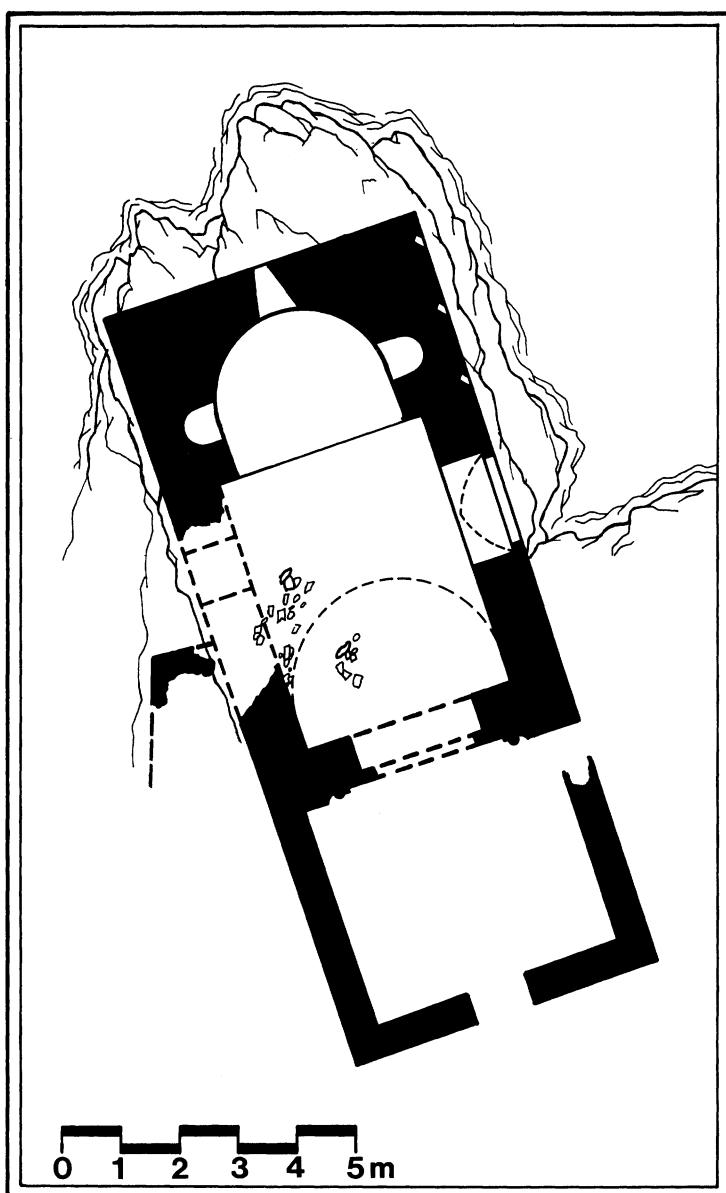


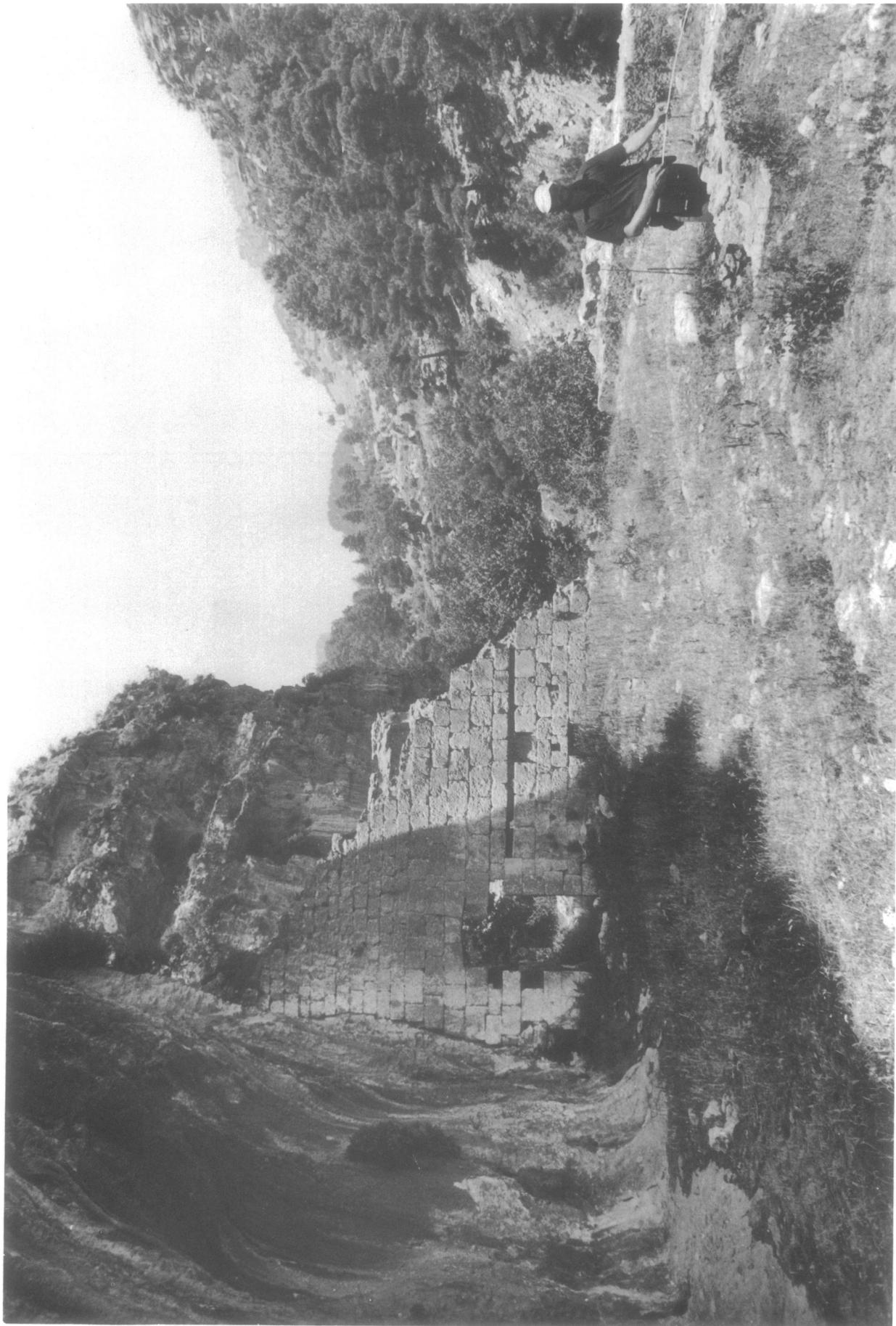
**KIZ**  
(NEAR GÖSNE)

0 5 10 15 25m

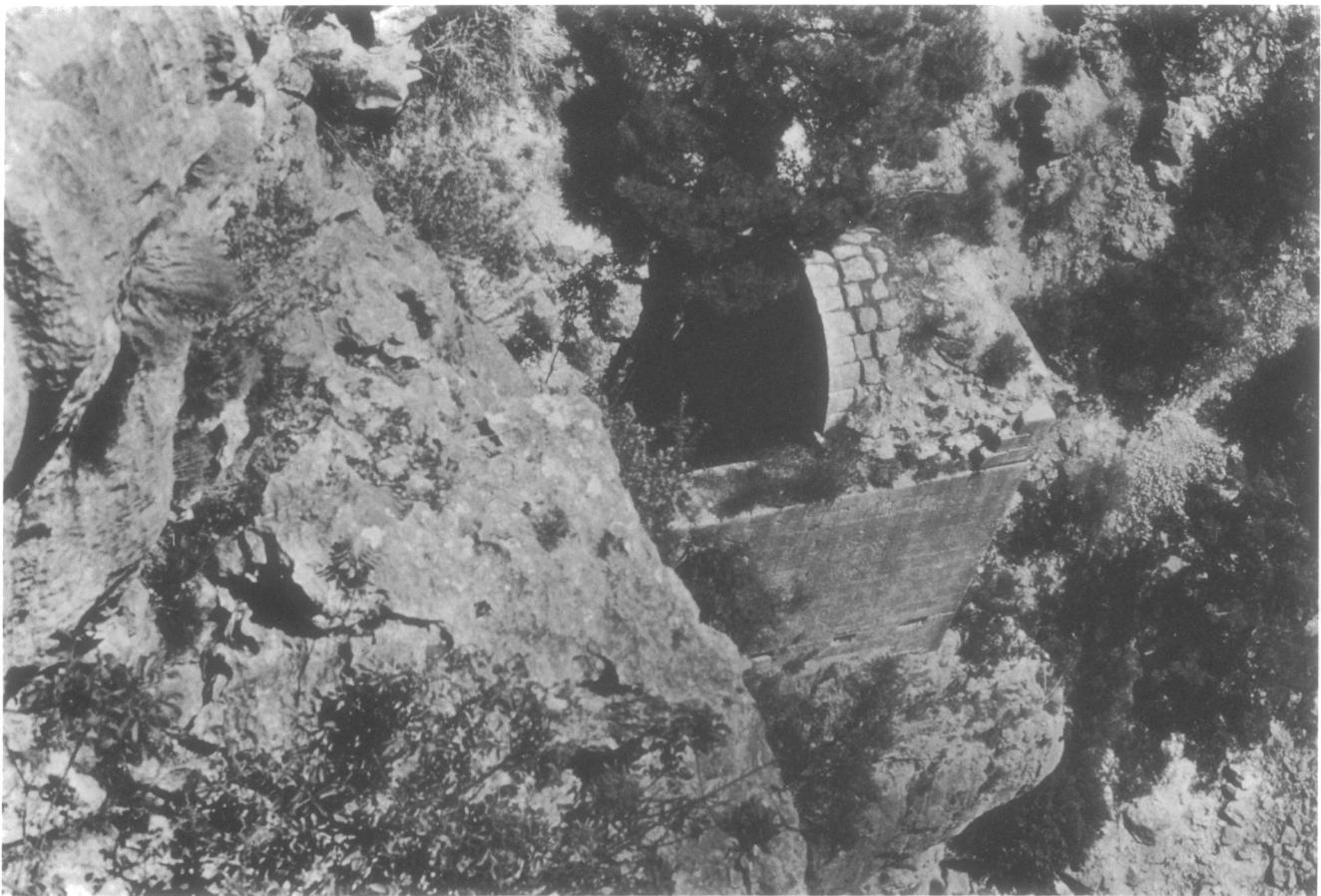


rwe 1979,81

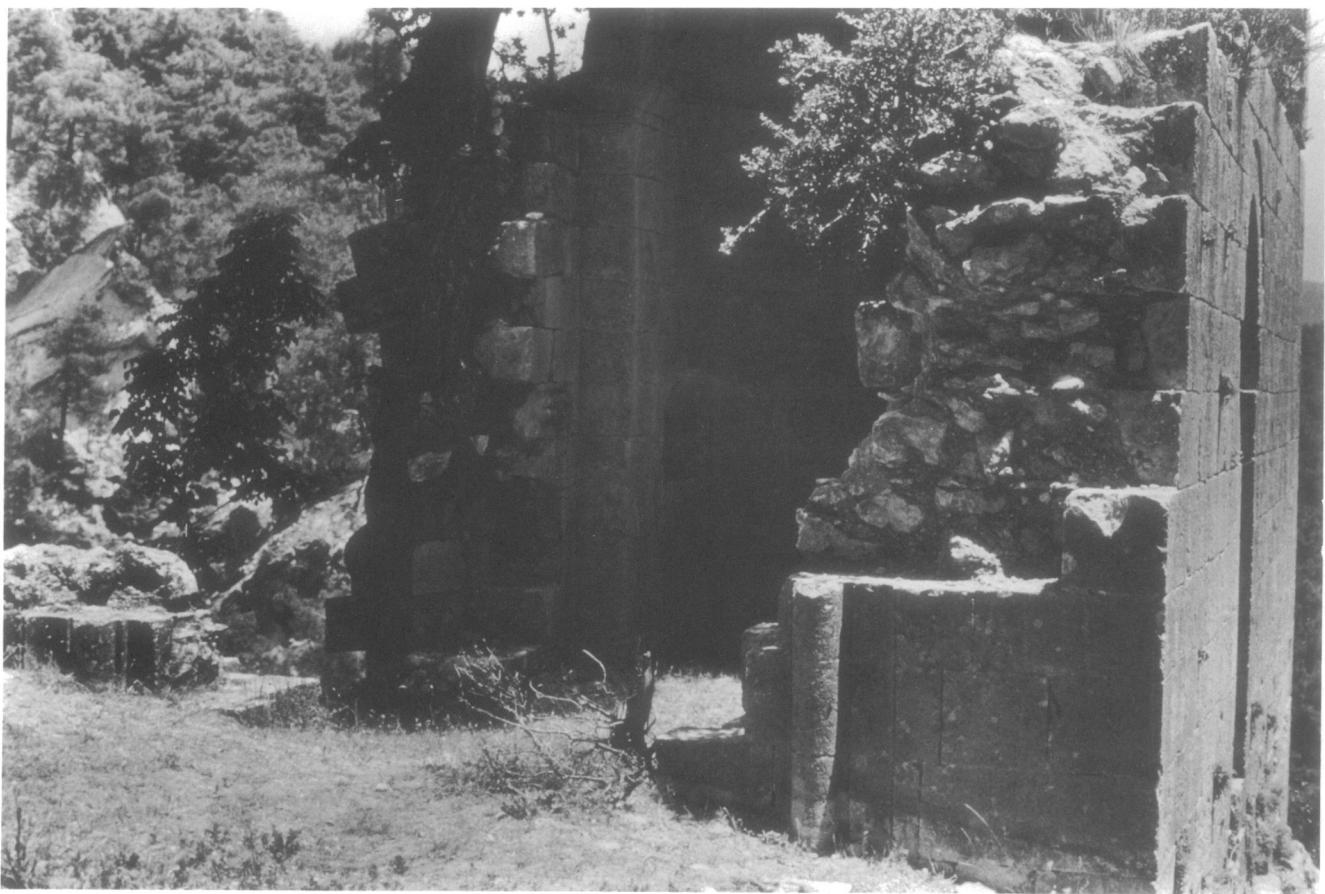




87. Kiz (near Gösne), Cloister, looking Northwest from Chapel to Gate A



88. Exterior, looking Northeast from above

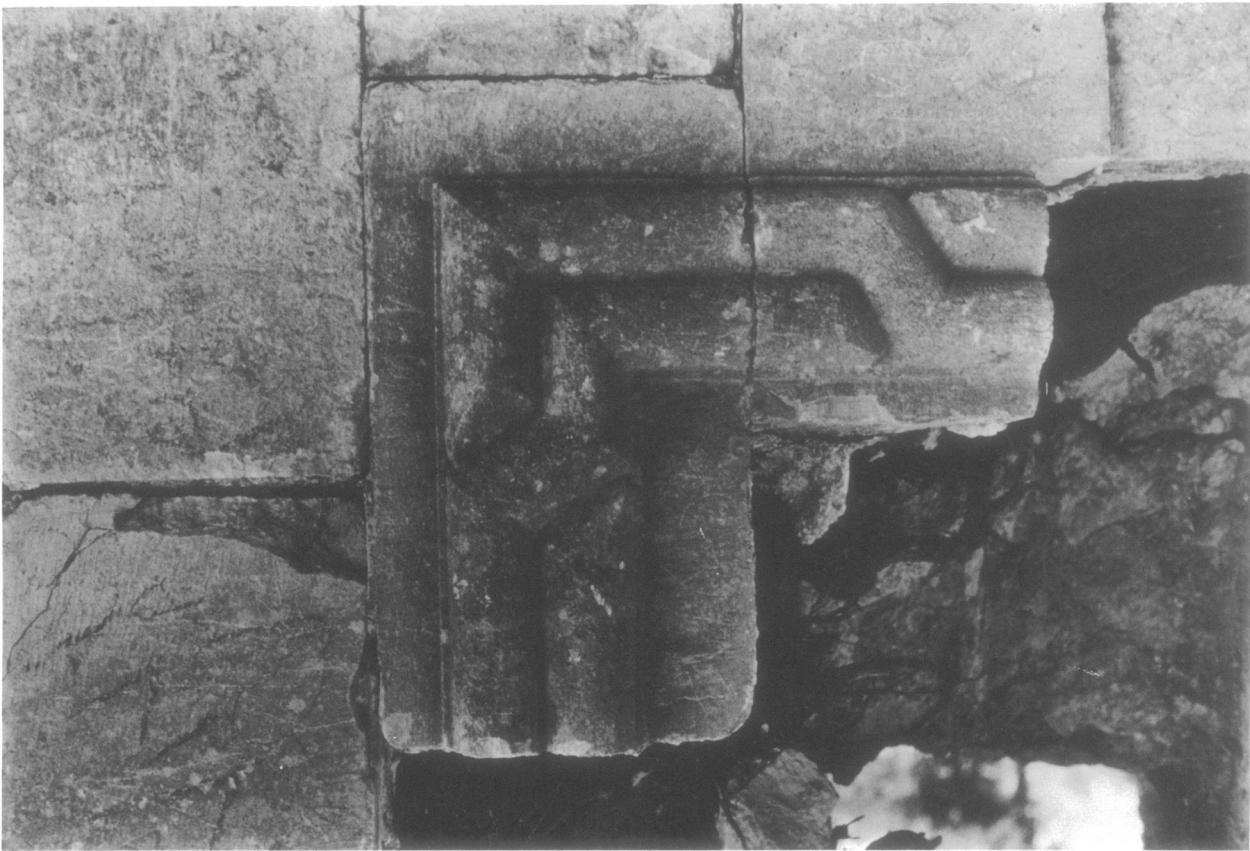


89. Looking Northeast into Nave and Apse

KIZ (near Gösne), Chapel



91. Cloister, looking South along East Wing into Area C



90. Chapel, Interior, looking Northwest at Relief in North Wall of Nave  
Kiz (near Gösne)